"TripleX" — the safety glass

THE SPHERE, MARCH 7, 1942
With which is incorporated "BLACK & WHITE" 1/6

# THE SPHERE

Vol. CLXVIII No. 2198 WITH WHICH IS INCORPORATED THE GRAPHIC MARCH 7 1942

KING SIX
CIGARS
8D. each
MAKERS OF FINE CIGARS SINCE 1839
MADE BY J. R. FREEMAN & SON, LTD.

By Appointment
The salt of the earth—
Cerebos Salt

Grant's Scotch Whisky
"FAMOUS FOR HALF A CENTURY"

* McVITIE & PRICE * Biscuits of Highest Quality *

ENJOY MORE TEA
THE DOCTOR'S CEYLON TEA
ENJOY TEA MORE
2 ozs. of The Doctor's Ceylon Tea goes much further than 2 ozs. of ordinary tea
PRICE 3/- per lb.
CVS-285

Always ask for Bass
TRADE MARK

FOR BETTER SHAVES!
"WARDONIA" BLADES
Small Packet 1/-
Large Packet 2/6
Plus Purchase Tax
Ask for them at N.A.A.F.I.
FIT ALL 3-PEG RAZORS

For sweet breath and pearly teeth - use
Euthymol TOOTH PASTE
FROM ALL CHEMISTS

ALL CLASSES OF INSURANCE TRANSACTED
CAR & GENERAL INSURANCE CORPORATION LTD.
83, PALL MALL, LONDON, S.W.1.

'Second to None'

GREYS

CIGARETTES

Just honest-to-goodness tobacco

20 for 1/6 + 10 for 9D Plain (Green Label) or Cork Tipped (Red Label)

THE GREYS MADE HISTORY

*

1742

*In ecclesiastical-looking mitre caps which replaced their three-cornered hats, the Greys fought for King George II. At Dettingen, Fontenoy, Raucoux, Laffelat, Bergen, Minden and Warbourg the Greys wrote in blood and valour further stirring pages in their regimental history.*

ISSUED BY GODFREY PHILLIPS LTD.

Volume CLXVIII No. 2198 The SPHERE, London, March 7, 1942

THE SPHERE
With which is incorporated "THE GRAPHIC"
The Empire's Illustrated Weekly
London, March 7, 1942

**AFTER THE NIGHT RAID ON NORTHERN FRANCE: STILL WITH BLACKENED FACES, men of the supporting Infantry return home after having taken part in the attack on the German Radio-location post at Bruneval, near Havre**

In combined operations on the night of February 27-28 joint forces of the Navy, Army and Royal Air Force attacked and destroyed an important German radio-location post at Bruneval on the coast of France, twelve miles north of Havre. Parachute troops of an air-borne division were dropped by bombers of the R.A.F. and, in the latter part of their task, were supported by Infantry who had been landed on the coast. The attackers and the German prisoners taken by them during the raid were brought back to Britain by the Royal Navy. Bruneval is a big German radio-location post near the French coast opposite Brighton: when the raiders left, the whole place had been destroyed and was a tangled mass of steel, cement and wrecked apparatus. The black faces of the infantrymen seen in the above picture were part of the night camouflage! (*Further pictures on pp.* 292-3)

Postage—Inland, 2d.; Canada and Newfoundland, 1d.; Elsewhere Abroad, 1½d.

# A WAR NEWSLETTER —No. 131

1, NEW OXFORD STREET, W.C.1.

## A Late Note on the New Men.

—I have always believed that one of the first and best assets of true religion was *jolliness*—perhaps I am coining a word. I have found that the best churchmen I have met were also the jolliest. This is especially true of bishops. I never had so many occasions for loud and even "impious" laughter as when in the company of Bishop Gore. Dick Sheppard, too. If this experience be soundly based, there is good augury for the new Primacy. I am quite sure no Archbishop ever had a louder and jollier laugh than Dr. Temple's.

. . . . .

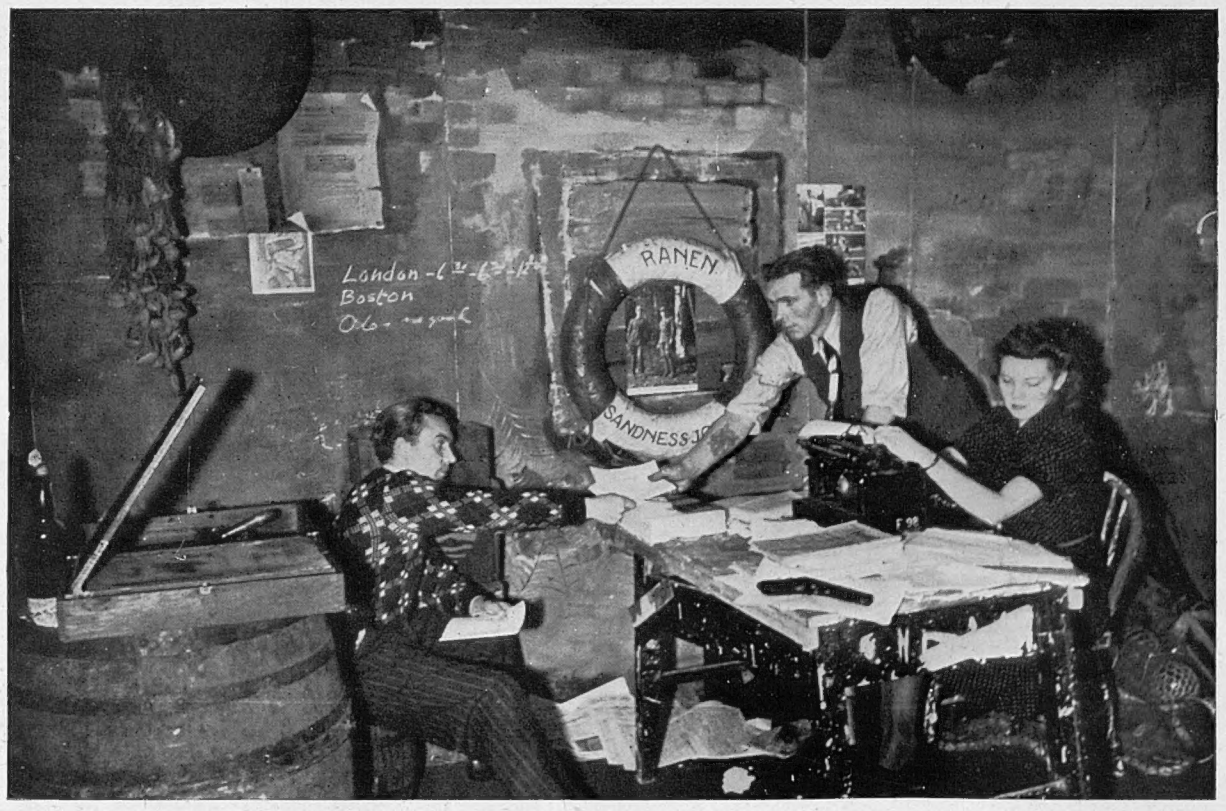
I shall keep my eye (my air expert has warned me to do so) on Air Marshal A. T. (or "Bert") Harris, at the head of Bomber Command. I fancy his selection was decided on some weeks before the Channel fiasco, and if so that is good news. I believe he has the necessary faith in his own judgment and the necessary moral courage to implement his opinions. I think he has the Nelson touch and does not wait for the tardy consent of Olympus before doing essential jobs.

. . . . .

I shall keep my eye on Sir James Grigg; and I (for one) shall *not* confuse him with Sir Edward Grigg. I confess that I laughed loudly when I read that one patronising Parliamentarian had declared that, while it was in principle highly undesirable to appoint a Civil Servant to such a political key-post, he would waive his objections in the special critical circumstances. Heavens! If among the permanent officials there is found one man who stands out for his contempt of forms and precedents, for his rejection of the umbrella of committee responsibility, has not that Civil Servant—that *rara avis*—as great a claim to such promotion as a big-business or a party-hack nominee?

## Capitalism or Communism?

—Those speakers who, in the latest war debate, advocated equality of reward and equality of sacrifice for every man and woman engaged in the war effort in any and every sphere and position were advocating a reform, and a cure for our many weaknesses, which ideally are irrefutable and impregnable against criticism; pure, essential sense, justice and political wisdom in wartime. Your Premier, your private soldier, your munition worker, your salvage steward, your fire-fighter and your skilled mechanic—each would receive a penny a day in the communal vineyard, with a sum added to the Premier's penny as "entertainment allowance," and a bonus to your skilled mechanic for his special contribution. Ideally impregnable; practically, pure moonshine. Why? Because no one seriously disputes that this nation is run on capitalistic lines; that that "penny-a-day" ideal implies root-and-branch reform; that in Britain political evolution is very slow, and that particular revolution needs a century of time; that as yet there is literally no proof that either among the protagonists of the Government of any party nor in the vast majority of the nation is any such ideal desired. That being admitted, we must face the facts. These facts include that, while the war lasts, unless our existing system of government and the pattern of our institutions can by luck or good judgment achieve spectacular victories, we shall be regarded by Russia, and perhaps by China, with increasing surprise and amazement, which may slowly change to suspicion and even to contempt. This theory is hard to controvert, men and nations being what they are in times of stress. Since the ideal is impracticable of accomplishment, what can we do to lessen the dangers inherent in our existing institutions? The new leader of the House gave proof that he saw the dangers ahead and had catalogued a few of the vital reforms which might reduce those dangers. He undertook to explore avenues for the means to conscript to some form of war service that quarter of the nation which still folds its hands and waits for Russia to win the war; to clip the wings of the war profiteers; to examine the possibility of strengthening and purifying the weapon of broadcast propaganda, so that it becomes, at home, a weapon of truth, dignity and moral stimulus for a brave and noble race, and, abroad, a strong sword against our enemies and a strong deterrent to any remaining Axis-wobbling neutrals or slave States. With the means at his disposal, this is a programme for a Hercules.




**HOW NORWAY'S UNDERGROUND PRESS OPERATES: In the "newspaper office"—from left to right are Lars Hansen, Kaare Hangen and Else Lier:** This picture illustrates the manner in which the anti-Nazi Press operates in many parts of Occupied Norway, where patriots are defying death and concentration camps in order to spread the truth among the oppressed people. The picture was taken at a realistic reproduction of such an office in London: it was erected under the personal supervision of people who have recently taken part in such work and who have escaped from Norway. The news is received in such underground offices by means of the radio, the B.B.C. bulletins then being translated into Norwegian

## Bricks without Straw.—

The best argument for the view that war news and war talk should—for a time, at any rate—henceforth absorb a rather less huge proportion of our available newspaper space is this: a profound silence and a deep fog lie over most of the vital battle areas. It is a condition perhaps without precedent in our history. Libya, the Far East, Russia, we see only the 'ooves of the 'osses through a chink in the tent-skirting. Because of this, news is too often unreliable, and views more than usually insecurely based on proven facts. If you turn back to the files of only a year ago, you will have the surprise of your life, and, if you had a high opinion of the wisdom of informed circles in Britain, a bitter disillusionment. Whether it were Mr. Dalton, or the M.O.I. of the hour, or the Spokesman of the Air Force or Army or Navy, the things they wrote or broadcast a year ago read to-day as foolishly (in bulk) as the petulant threats of an angry baby or the confident promises of a weak-minded urchin. And from these prophecies and pronouncements we fostered our wishful thinking and with them diluted the pure spirit of resolution and all-out effort. They were just . . . distractions, and dangerous distractions; the wrong sort of recreation for the mind. Germany didn't disrupt; the blockade was not the weapon it was claimed to be; our bombing of Germany has not had the expected results; Japan did not decide on the right hour to strike as a result of indications of British or American unpreparedness as revealed in the Press of those countries. . . . You can adduce a score of examples, all of which prove that there has been all too much war talk.

## And Nothing but Bricks.

*Toujours perdrix!* Bricks without straw are bad bricks; nothing but bad bricks is a disaster. Medical opinion, psychological experience, ordinary common sense and daily workaday experience all combine to condemn the practice. In normal times the hardest workers have always found it necessary to switch off. The General, having made his dispositions to the last detail, went trout-fishing; Mr. Balfour read light novels; Disraeli wrote a novel; Gladstone translated Homer; Chamberlain fished; Churchill laid bricks or painted pictures. . . . Every family doctor prescribed *change*—change of scene, change of occupation, change of diet. . . . I think we have gone mad to-day in suffering this total absorption in war to continue so long. It is flying in the face of every cardinal principle of health of mind and body that we should condone the practice of *toujours perdrix* at a time when our bodies and minds were never before so strained by hard work and anxiety, at a time when recreation for mind and body is more necessary than ever. We cannot change the scene of our labours to-day, nor the diet of our bodies; it *is* still possible, if we insist on it, to vary the diet of our minds; and we are mad not to insist on that change. If to-day there *are* men engaged on planning the years of the peace which is not yet won, let us not gird at them, but let us interest ourselves in their theories, however visionary. If there be to-day a few men still probing into the identity of Shakespeare, the author of the sonnets, let us rush into the Baconian dog-fight. Let us by all means talk of flowers as well as of vegetables; of bows and arrows as well as of tanks.

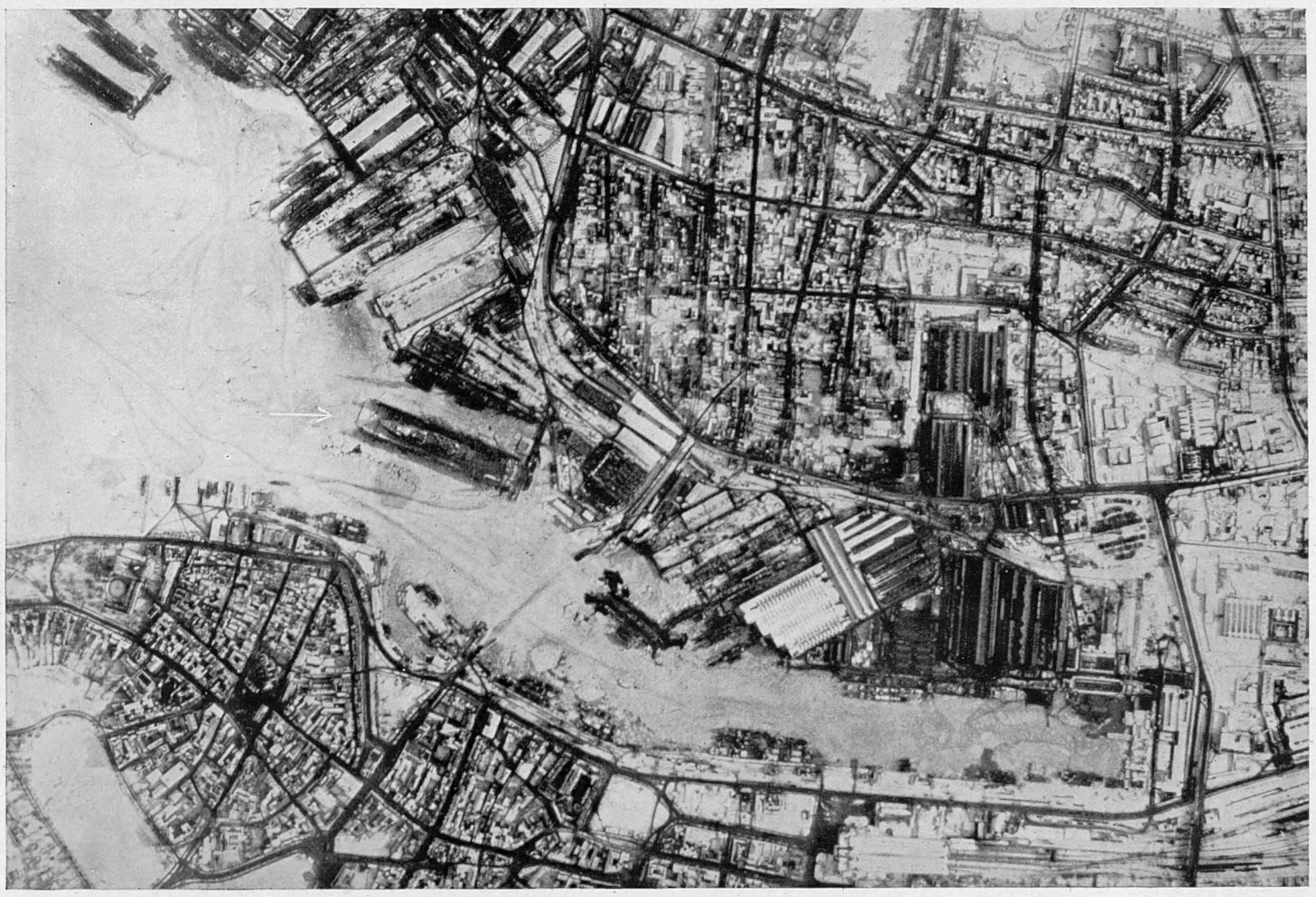
## Statesmanship from the Throne.

—In these dark and anxious days the King and Queen are performing for the nation a service of infinite value, not even partially realised or acknowledged, in maintaining and preserving the permanent dignities and values of our great national traditions and in keeping that right sense of proportion between the ephemeral and the permanent, between the expedients of a day and the needs of an era, between the calm dignity of a great nation and the hasty devices of a people in a critical pass, between things eternal and things temporal. In a gruelling and continuous programme of engagements designed to encourage the national war effort in every sphere, they never neglect the arts of peace nor the permanent values of gracious living. By their practice and example they preserve and uphold for us, in an age which grows daily more drab and bleak and barren, culturally and intellectually, the sweets of civilised existence and the glories of our race; and many of us must realise how much we derive from this wise and courageous policy, which is vision and statesmanship of a high order; or (to put it no higher) plain common sense in the leaders of a State at War.

## Weather—An Undesired "Record."

—In some parts of Europe the winter has won new laurels—achieving the record severity observed for a century. I do not know to what extent it has benefited the Russian arms on balance. But whether or no we have gained or lost more by this long spell of bitter winds and hard frosts and cold mists, we must admit that, in our immediate surroundings and circumstances, we are most conscious of the appalling waste of vital "man-hours." Of essential jobs crying out to be done in gardens and on farms, all too many remain to do, and should have been done long since. That onion-bed should have been dug at Christmas, to give it a fair chance to "settle." The pruning of fruit-trees (let alone of roses) should have been long since finished. But who dared prune and risk the splitting of branches? We have left undone those things which we ought to have done—through no fault of our own—and have done those things which were forced on us and were mere non-constructive, emergency measures (that everlasting snow-shovelling!). How to repair these omissions? How now to fill the unforgiving minutes which remain? 120 minutes' worth of labour for each of them will hardly suffice. Potato-time will be on us before a square yard of the kitchen garden is trenched. These next weeks, a new meaning will be attached to "digging for victory." We must defeat two enemies—Hitler and a Nazi winter.

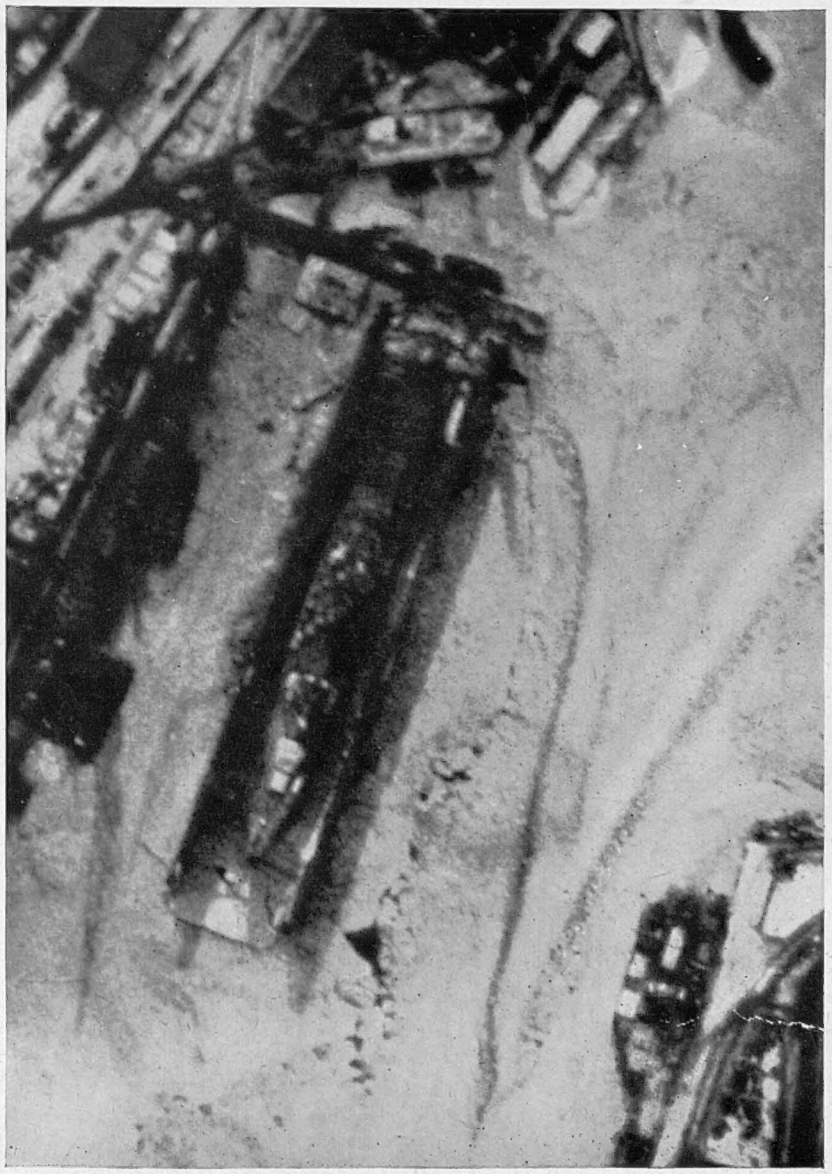
THE OLD STAGER



**ALREADY LOCATED BY THE R.A.F. AND PHOTOGRAPHED FROM THE AIR:** The battleship "Gneisenau" in a floating dry-dock at Kiel, where she is now presumably undergoing repair after the "severe damage" she received on passage from Brest

# The GERMAN BATTLESHIPS in their NEW HOME at KIEL and WILHELMSHAVEN

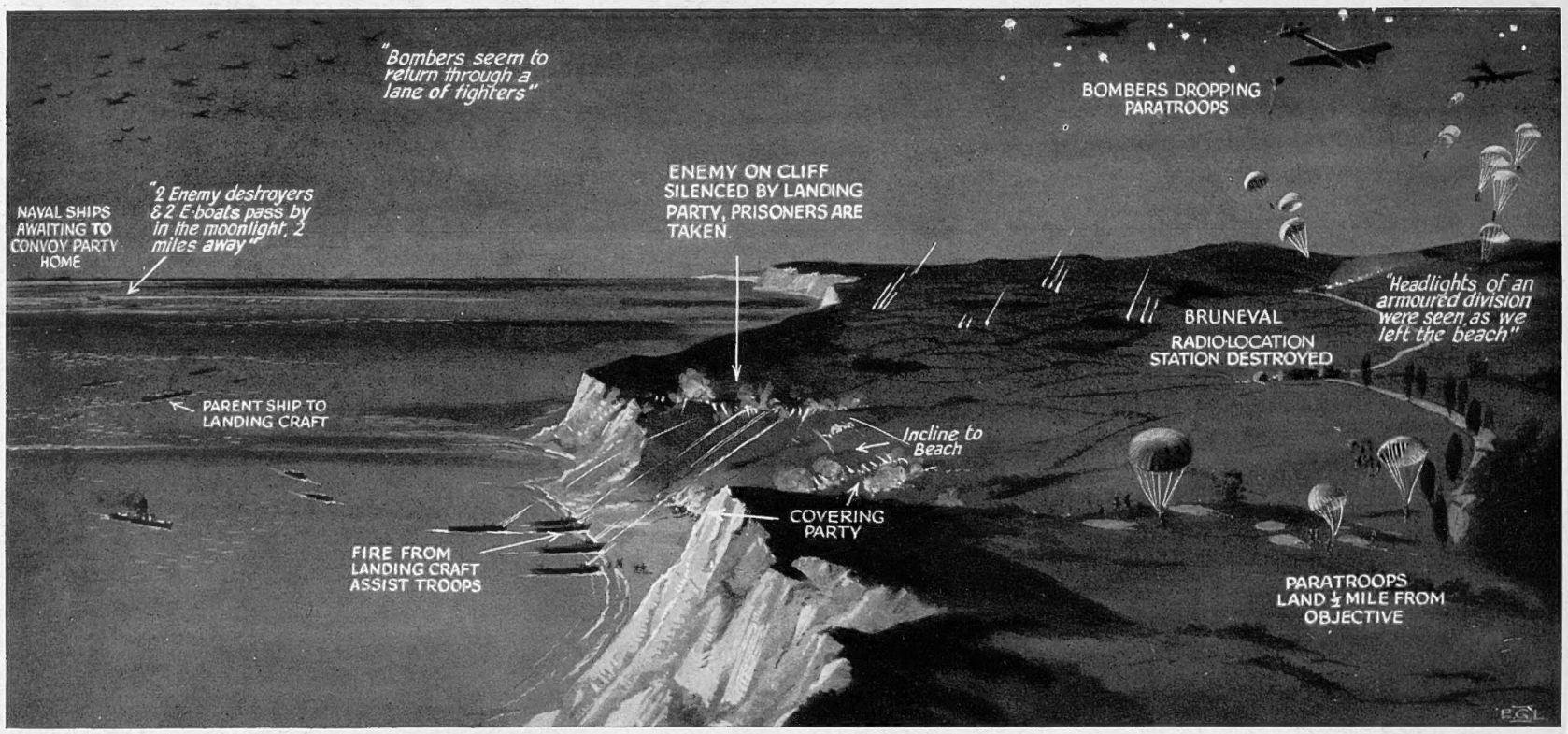
After their escape from Brest, where they had been bombed continually from the air, it was not long before the exact location of the German battleships *Gneisenau* and *Scharnhorst* was discovered by the R.A.F. Excellent pictures, too, were taken: so that, presumably, both vessels will once again become a prime target for our bombers. One of the warships is in dry-dock at Kiel; the other in the dockyard at Wilhelmshaven. In his speech in the House of Commons, Mr. Alexander, First Lord of the Admiralty, stated that both battleships suffered severe damage during their flight up-Channel: if this is so, they must obviously remain in dock for some time before they can hope to put out again. "Delaying action" by the R.A.F. may well cause their stay in dock to be a long one



**A CLOSE-UP VIEW OF THE "GNEISENAU" in the dock at Kiel. Presumably she will now become a constant target for the R.A.F.**

**THE SECOND BATTLESHIP, THE "SCHARNHORST," lying in the dockyard at Wilhelmshaven, alongside the south wall of the Hipper Hafen**

# The BRITISH SWOOP on the NAZIS in OCCUPIED FRANCE—Official Pictures



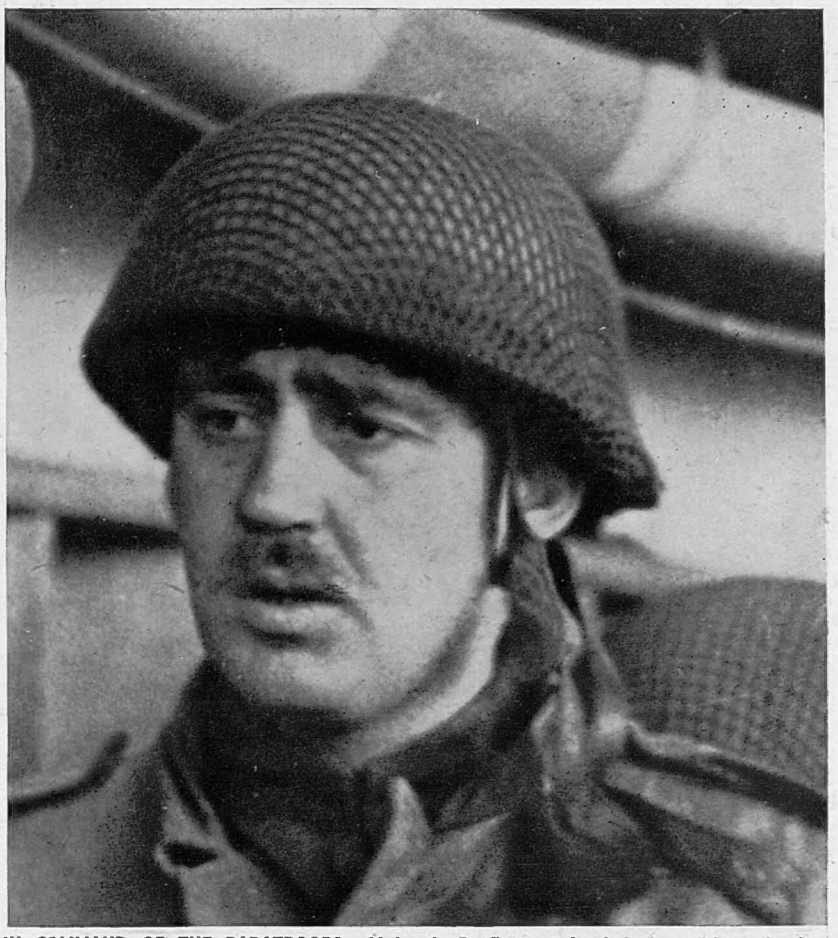

**A DIAGRAMMATIC RECONSTRUCTION OF THE ATTACK AT BRUNEVAL: The bombers of the R.A.F. drop parachutists, whilst infantry land to assist in their safe return, and Naval craft await to convoy the whole expedition back by sea**—*Drawing by E. G. Lambert*

The Raid carried out on the night of February 27-28 had as its objective a valuable German radio-location unit at Bruneval, twelve miles north of Havre: in the operations the Royal Navy, Army and Royal Air Force each played an equally important and inter-dependent part. The "carrying force" of bombers (the Force Commander of which is Group-Captain Sir Nigel Norman, Bart.) was led by Wing-Commander P. C. Pickard, D.S.O., D.F.C., of "F" for Freddie fame. The parachute descent force, under the command of Major J. D. Frost, was dropped, in bright moonlight and slight mist, within easy reach of the objective, despite enemy flak concentration upon the low-flying aircraft during the run-up.

"Diversionary operations" were carried out by aircraft of Fighter Command. The ground operations were carried out in the face of strong enemy opposition—which opposition, however, in view of the known value to the enemy of this particular radio-location station, was not unexpected. Having completed their tasks, and carrying with them German prisoners, survivors of the garrison, our troops made their way to Bruneval beach under cover of fire from our light Naval forces, which had meanwhile approached from seaward. The German beach defences, taken in the rear by the parachutists, and covered from seaward by the landing craft, military escort (found by the Royal Fusiliers and South Wales Borderers, Home Forces), were overcome. The embarkation was completed in good order and all our Naval craft returned safely to their bases

**SOME OF THE PARATROOPS WHO TOOK PART IN THE RAID—and some of the sailors who brought them back—on board one of the Naval vessels, in which the paratroops and infantry returned safely home after the attack on Bruneval**

ONE OF THE MOTOR LAUNCHES which brought back some of the raiding party: A couple of paratroops are seen in the foreground



IN COMMAND OF THE PARATROOPS: Major J. D. Frost, who led the raid, and who was at the head of the men dropped by parachute near the objective

GERMAN PRISONERS BEING LANDED ON ARRIVAL IN BRITAIN: These came from the post at Bruneval, which was destroyed

PRISONERS BEING SEARCHED ON ONE OF THE VESSELS: The man on the right is a member of the *Luftwaffe*, the other is an infantryman

WING-COMMANDER P. C. PICKARD, D.S.O., D.F.C. (of "F" for Freddie), the C.O. of the Squadron which carried the parachutists

ONE OF THE CRAFT USED FOR THE LANDING OF INFANTRY ON THE BEACH returns to port in Britain at the successful conclusion of the operations

SEE STAT
LP 500
SINGAPORE



# LAST SCENES in SINGAPORE before the Surrender

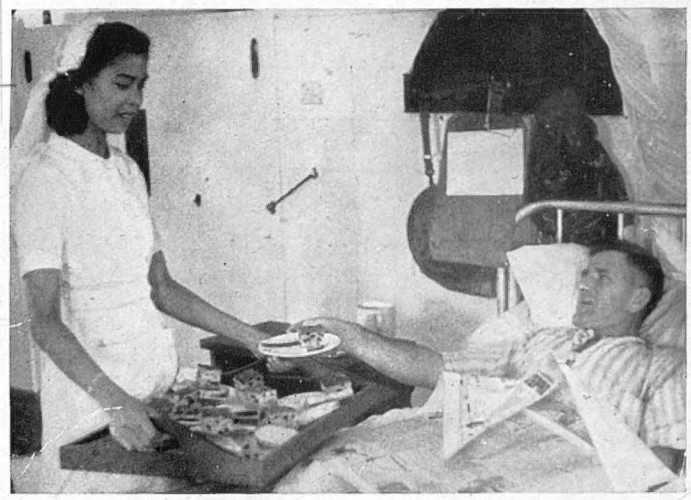
**THE PALL OF SMOKE OVER THE CITY DURING A JAPANESE AIR RAID : The enemy aircraft made many attacks and, over the suburbs, often flew quite low. As well as bombing the city, attacks were made on shipping ; from the sea, as the last evacuation ships left, a pall of smoke hung over the island**

The Battle of Singapore lasted for sixteen days—from January 31, when the famous Causeway was blown up, till February 15, when the garrison surrendered after a seven-day stand. The pictures reproduced here are the most recent to be received in London, showing the last days in the city whilst under assault by the Japanese. Air raids and bombardments were constant during this period. The shipping in the harbour, in particular, was subjected to attack: from enemy sources it was reported that "thirty or more ships (none smaller than 1,000 tons) were reported anchored in Singapore on Friday night, but they were all gone in the morning"

**A SCENE ON THE QUAYSIDE AT SINGAPORE, as women and children in considerable numbers were evacuated shortly before the Japanese onslaught on the island**

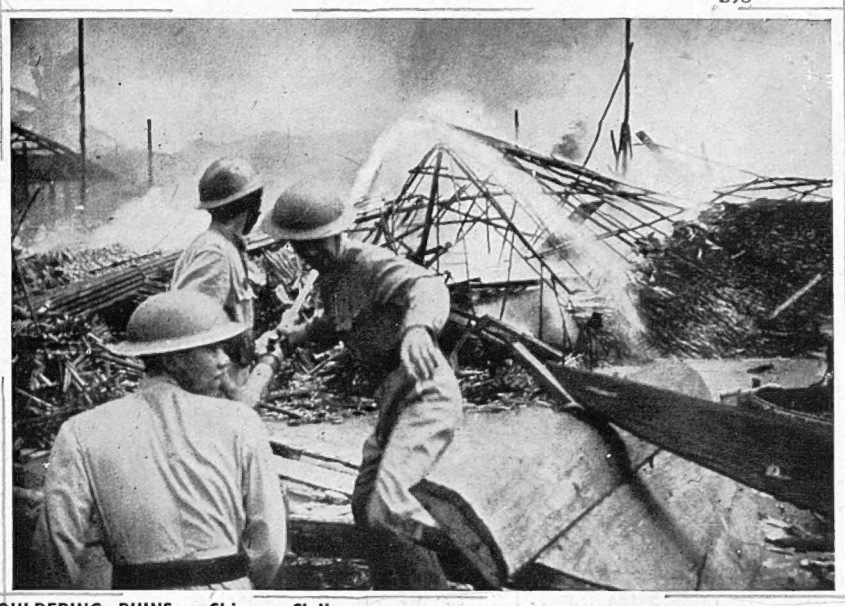
**CHILDREN FROM UP-COUNTRY STATIONS in Malaya preparing to leave Singapore for Home and safety**

**WAVING FAREWELL TO THOSE WHO REMAINED BEHIND : Many of the evacuees from Singapore are now in Java and Sumatra ; many others have already arrived safely in Britain**



**A MALAY NURSE REMAINS ON DUTY : A number of British Malay nurses stayed on after the surrender to tend the wounded. This Englishman had been flung twenty yards from his truck by a bomb explosion at Ipoh**

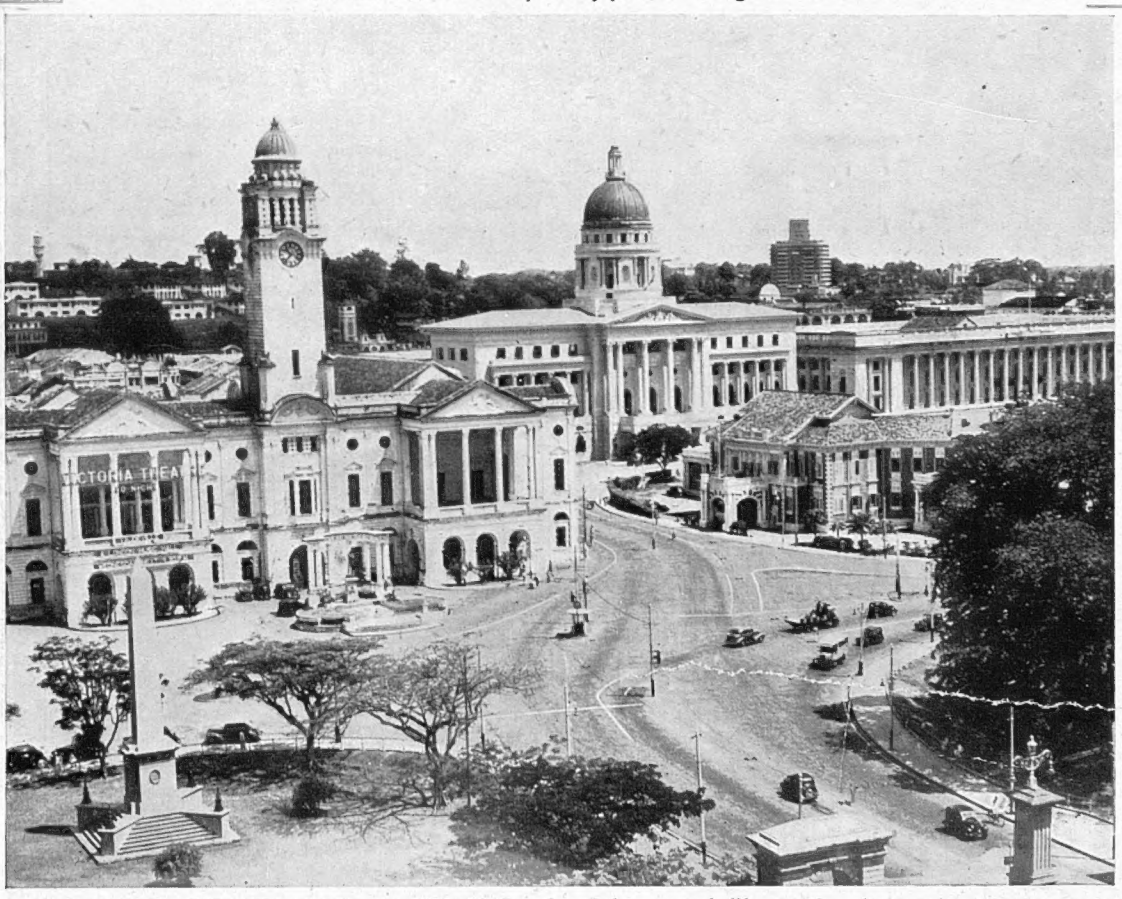
RETURN
MAIL NEWSPAPERS
PHOTO LIBRARY



**DURING THE JAPANESE AIR RAIDS MANY NATIVE HOUSES WERE REDUCED TO SMOULDERING RUINS.** Chinese Civil Defence workers were particularly efficient, and their heroism has been praised by many correspondents

**AT THE APPROACHES TO THE SINGAPORE CAUSEWAY : A first picture, just received in London, which shows one of the one-man tanks used by the Japanese during the assault on the island**

**BACK IN LONDON—The Commander of the Fortress of Penang :** Brigadier C. A. Lyon, who superintended the evacuation. Most of the women refugees are the wives of Civil Servants and serving officers stationed there



**RAFFLES SQUARE, THE VERY HEART OF SINGAPORE, where the normal life of the city was carried on right till the very last moment before the surrender**

The surprising thing about the Japanese assault on the island of Singapore was the confidence of the civilian population who, up till the last moments firmly believed that the city would not fall. Even during air raids and bombardments, life seemed to go on normally—with dances, cinemas, cafés and restaurants in full swing. In Raffles Square one correspondent reported that he could see queues forming up for the cinema even whilst the enemy was only a few miles away! On Friday, the 13th, the Governor issued a proclamation that "Singapore Must Stand—It Shall Stand." On Sunday night, the 15th, the city had surrendered

**AFTER THE SINKING OF THE "REPULSE" : Cecil Brown, Columbia Broadcasting correspondent, seen on the deck of a rescue destroyer**

S/S on 8½ x 6½

# THE WINTER CAMPAIGN IN RUSSIA

IN THE STREETS OF MOSCOW : A heavy tank passes through the capital on its way to the front. Note the wintry roads and skies

IN A RUSSIAN MUNITION-FACTORY : The slogans declare that "We will avenge ourselves on the German Fascist vipers. Blood for blood! Death for death!"

HOW THE RED ARMY SKI TROOPS ARE TAKEN UP TO THE FIGHTING FRONT : The white-robed soldiers are driven to the advanced lines on specially-constructed sledges

A DELEGATION OF WORKING PEOPLE OF UZBEKISTAN visit the front. Lieut.-General Govorov explains the progress of operations

THE "HERRENVOLK" IN RUSSIA : German prisoners, who are obviously suffering from the intense cold. These men were captured by the Soviet Army on the South-Western Front. Most of them were inadequately clad for the bitter Russian winter

ANOTHER GROUP OF PRISONERS, downcast after capture, and again inadequately fortified against the biting cold of the steppes

NAZI PRISONERS making repairs to their clothing in the warmth of a Russian house behind the lines after capture on the Eastern Front

LP500 SINGAPORE

**REFUGEES FROM SINGAPORE HIDE IN A JUNGLE BAY: Leaving the harbour by night, the small liner ran to a secluded island and lay there inconspicuously throughout the day. She then pushed on in darkness until the next day, when the same process was repeated**

**AT AN INTERMEDIATE PORT AFTER LEAVING SINGAPORE the outgoing tide left one of the refugee ships stranded high and dry for some hours. Because of labour shortage, the passengers themselves were compelled to coal the vessel before proceeding further**—*Drawings by W. G. Whitaker*

When the Japanese grip was closing upon the island of Singapore, in spite of the strong resistance put up in the centre of the island, it became evident that the time had come when the white women and children must leave the island. The famous harbour had, during the last few days, become a very hot spot indeed, for all types of shipping were gathered there: it was indeed nervous work awaiting the actual moment of departure.

The refugees on one ship had a spectacular scene thrust before their very eyes. A Japanese barge party was attempting a landing in the harbour itself. It was met by concentrated gunfire, and the attempt was obliterated amid a spectacular display of waterspouts, which rose and fell from the surface of the water surrounding the doomed barge.

Dodging as best they could the enemy planes, the ships drew out into the night. Some had to anchor, owing to the proximity of mine-fields, till the first light of dawn came to guide the steamers out of the danger zone: several of the ships made for the shelter of secluded islands during the daytime, where the tall, tropical vegetation afforded some useful cover from the prying eyes above. When night came the ships pushed on to another point.

Many of the passengers did not know where they were being taken. They merely knew that they were being carried away from a city which had been their home for a long time, but which was now in imminent danger of falling into enemy hands. Their last vision of it had been lit by sudden flashes of fire, which illumined the smoke pall hanging over all.

One ship had stick after stick of bombs dropped around her as she pulled away from the blazing island. This vessel had been delayed at an intermediate port when the outgoing tide left her stranded for some hours. The accident, however, proved to be fortunate, for several ships which left Singapore at the same time encountered more severe attacks from Japanese bombing aircraft. Scores of Japanese planes were in the air when these vessels were making their desperate journeys, and it is remarkable that they should have had the luck they did.

In some cases passengers had to assist in the ship's work owing to the shortage of labour. One ship was so damaged by bombs that she was forced ashore at an island: the following day an R.A.F. launch from Singapore, towing two 30-ft. yachts, was observed and their attention attracted to the plight of the passengers. A few were taken on board and thus completed an adventurous journey. The two yachts had had their sails blown to ribbons by one of the fierce storms which are apt to blow up in these waters. The rest of the passengers left behind were picked up by other passing steamers.

# The FLIGHT from SINGAPORE

## *Last Days in the Doomed City, and the Evacuation from Singapore Harbour Under Attack by Japanese Aircraft*

IT was not until the tide of battle was actually flowing over the island of Singapore itself, and the Japanese troops were penetrating into the western suburbs of the city, that the last of the Press correspondents left by steamer for Batavia.

Since their arrival in the Dutch East Indian capital, these observers have been able to publish details of their experiences during the last days in the doomed city.

From the time when the Japanese forces first reached the southern shore of the principality of Johore (where the Sultan has carried out his resolve to remain with his people), the belief that reinforcements would arrive in time to rescue the city itself was widespread: among the Orientals, especially, this belief was absolute. And this confidence doubtless explains the picnic parties which certain Singaporeans organised in the neighbourhood of the Causeway in order to get a peep at the invaders!

When the invasion actually came confidence to a large extent still survived; but it now required a greater exercise of nerve to watch the masses of flame and smoke which burst out at many points along the northern edge of the island. The Japanese soon thrust across the Johore Strait from north and west: all the air bases became unusable: shells from the Japanese 5·9's whined their way to the northern part of the city: vessels carrying special units in process of evacuation from Singapore began to push their dangerous way through the islands to the south-east, chased over part of their journey by Japanese dive-bombers.

In Singapore itself, all the newspapers had by now shut down—with the exception of the *Singapore Free Press*, which still struggled on. One of the last issues of this journal had a big-type headline stating that "Singapore Must Stand—It Shall Stand!" and signed by the Governor (now a prisoner in Japanese hands). The fashionable Raffles Hotel still continued to function and many large commercial houses remained open. The civil population was advised to disperse amongst the open spaces, and public and private grounds were thrown open for this purpose.

One correspondent has related that when, towards the end, a "military spokesman" was giving his usual daily talk on the situation, the party consisted of four—spokesman, correspondent, and the representatives of two local newspapers! Four thousand wounded lay in the Singapore Military Hospital, and twenty English and Australian nurses had remained behind to attend to them. The last demolition work in the Naval Establishment at Seletar was accomplished with difficulty, the Asiatic labour force of 12,000 having shrunk to 800.

The Chinese transport drivers continued working to the end, although the great bulk of the native Malay population are reported to have regarded the struggle as one in which they were not personally concerned. Young Chinese Singaporeans, however, assisted in the defence of the city to the last.

Whilst the final struggle was taking place around Singapore's famous race-course, the city's wide harbour was still full of small ships and launches, many of which would have been useful, but that their native crews had deserted the vessels. One of the correspondents evacuated to Batavia has sent back to *The Times* a particularly frank despatch dealing with the whole state of affairs in Malaya and Singapore. In this he stated that the Japanese fighter aircraft was proved to be only a point or so below the Hurricane in efficiency; that we were always greatly outnumbered in the air; and that most of the Hurricanes which we *did* possess on the Malayan peninsula were destroyed on the ground when the Japanese launched their first attacks on the aerodromes. Many of the white troops (the Australians were conspicuous exceptions) never seemed to be up to the mark physically. Some had been too long in the tropical climate and had gone soft: others had only just arrived and were not accustomed either to the terrain or the climate.

With one exception, the absence of forceful leadership made itself felt from the top downwards. The material of the men was potentially good, but something was lacking to crystallise it, to co-ordinate it, to infuse it with the fire of confidence. The same lack of dynamism, of aggressive energy, characterised the upper ranks of the civilian Administration. Nor had the Government any roots in the life of the people of the country.

b

# THE LAST HOURS AT SINGAPORE

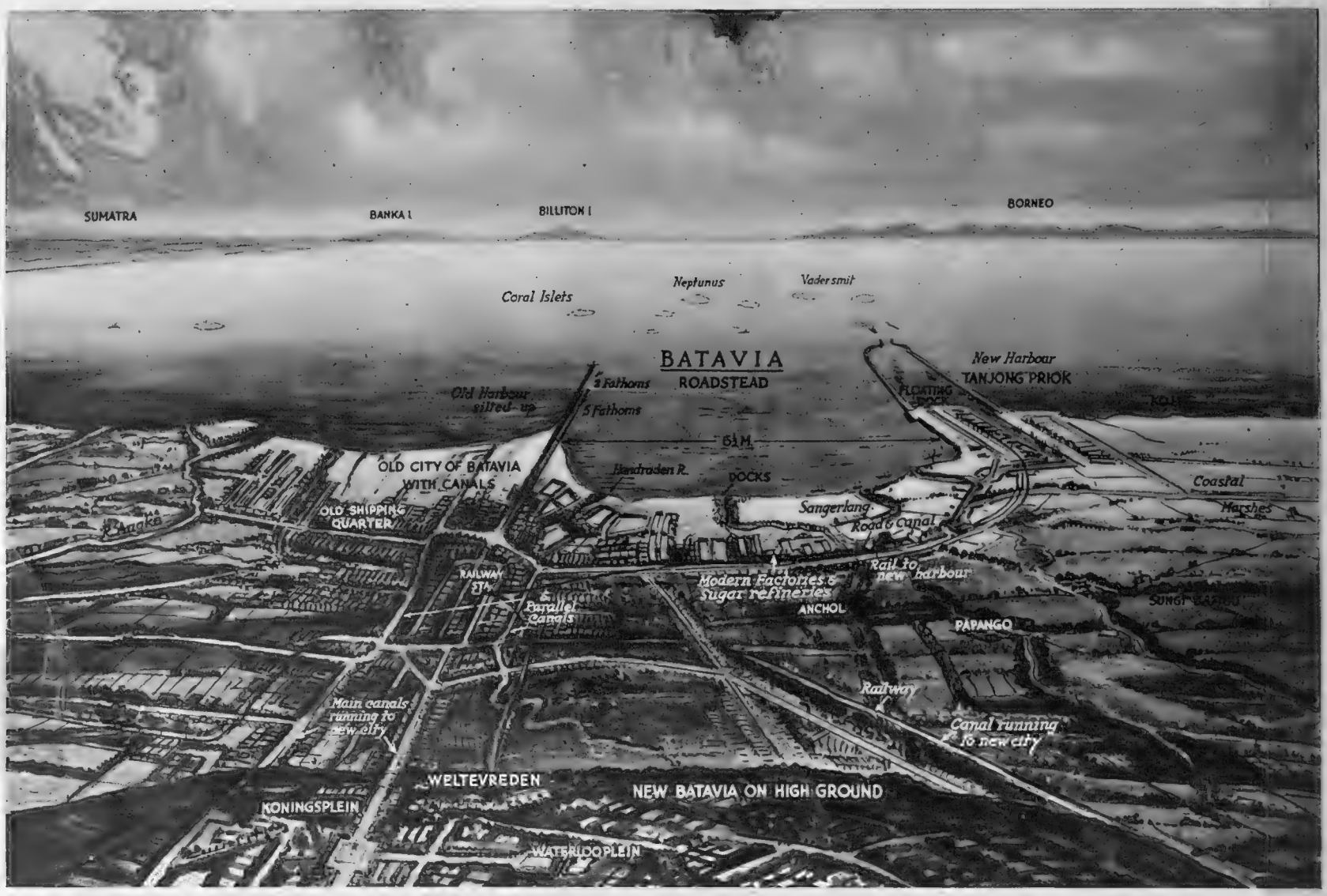
The Scene in the Harbour (One of the World's Finest)
as the Last British Evacuation Ships Left for Batavia

*—Specially drawn for* The Sphere *by Montague Dawson*

LP500
SINGAPORE

The night before the final surrender of Singapore was indeed a strange one. The waters of the harbour, lined with the white-pillared palaces of the great shipping offices, commercial houses and Government buildings, reflected the fire of battle as it raged only a few miles to the north. The final evacuation ships, with some escorting naval craft, were endeavouring to pick their way to safety amid a hail of bombs from enemy planes. A number of small craft were still moored in the harbour. No general evacuation had been attempted. The night was lit by flashes of great guns fired from Fort Changi and the islands immediately guarding the harbour entrance. In the background rolled huge masses of smoke and flame from burning oil tanks and subsidiary fires in the north and centre of the island. Most of the evacuation ships had miraculous escapes, although some suffered from direct hits and near misses.

NAVY
FILED MAR 1992




**BATAVIA, THE 300-YEAR-OLD CAPITAL OF THE DUTCH EAST INDIES—A view of the old and new cities**—*Drawing by Percy Home*

The searchlight of war has shifted from Singapore to Batavia, the wealthy Governmental and trading-centre of the Dutch East Indies. Formed in the early years of the seventeenth century, such an historic colonial capital cannot fail to bear evidence of its long and varied story. The city was for a few brief years in the hands of the British in the Napoleonic era; the existing signs of that occupation are rather social than architectural. The chief evidences of the last, and in particular of its golden age, are to be found in the Old Town—it should be said at once that Batavia is divided into two parts, the old city, with its numerous canals (there are five parallel to one another in Amsterdam fashion in the centre of the old town), occupying low ground near the sea, and the new city of Weltevreden, which occupies high ground some two miles from the sea-front. The old portion, with the still-surviving homes of the rich grower-princes of the eighteenth and early nineteenth centuries, is flanked by the old shipping quarter, the harbour and canals of which silted up to such a degree that a new port was constructed and opened at Tanjong Priok, 6½ miles to the east. The factory quarter lies on each side of the road to the new port. Behind this area tree-lined canals stretch southwards to the wooded heights of Weltevreden. The new city was built in order to avoid the unhealthy airs of the old. Admiral Bligh moved up to this healthier quarter when he arrived a sick and exhausted man after his remarkable boat journey from the scene of the mutiny of the *Bounty* to Koepang. Weltevreden has not the high-pitched, tiled roofs of the old town; in their place are wide, tree-lined boulevards, with some houses here and there embowered in trees. The central Governmental area is at Koningsplein, which is connected with the port by a wide thoroughfare

# CAPITAL OF THE DUTCH INDIES

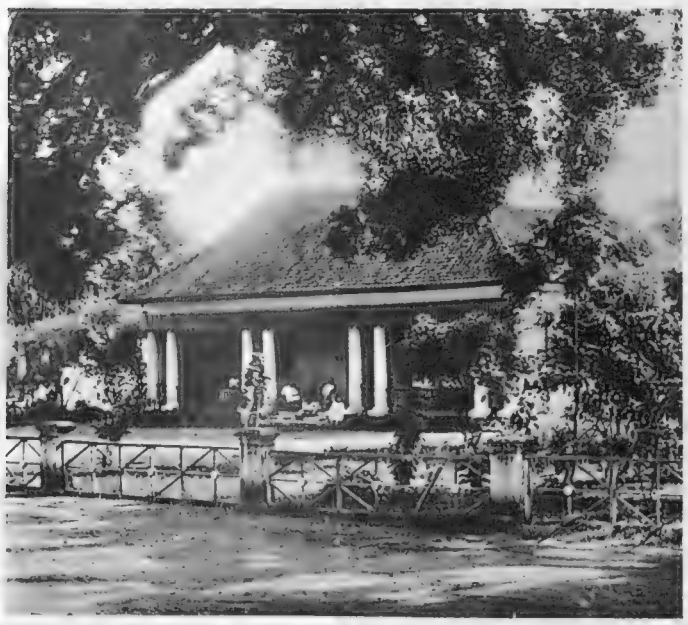
## *Batavia, the "Amsterdam of the Orient"*

Described by J. B. GOODSON

FROM Batavia comes the news of the enterprise and skill of our Dutch Allies operating in the Far East; yet the man in the street is often in doubt whether the name refers to a town, or an island, or an archipelago. Batavia is a city of over a quarter of a million inhabitants; it is the entrepôt and administrative centre of the Dutch East Indies, and was founded over 300 years ago. This early development arose out of the lucrative spice trade. Pepper and spices had commanded fantastic prices in Europe for centuries (owing to the unappetising winter diet of the times) and constituted the principal articles of world commerce. They were first carried from the East by the Arabs, following a route largely overland. Fifteenth-century political disturbances in S.W. Asia made this route hazardous and costly and stimulated the opening-up of alternative sea routes by the Spaniards and Portuguese.

The trade passed to the Portuguese, but the lure of adventure and high profits soon brought the English and Dutch into the field. The latter went straight for the goal, and, with strong financial backing from home, soon monopolised the greater part of the trade of the Indies. By 1610 they had established a trading depot and a protecting fort at Jacatra (where Batavia now stands), and here they were attacked by the natives in 1619. In revenge, the Dutch Governor-General, Jan Pieterzoon Coen, razed the Javanese settlement to the ground and on its site laid out the town of Batavia.

He made it the centre from which the whole of the Dutch East Indies was administered, and its commerce, which had been considerable in old Jacatra, grew rapidly. To its warehouses came the pepper, nutmeg and mace, the tobacco and oils of a thousand islands to await shipment to Europe. By the eighteenth century it had attained an unheard-of prosperity, its merchants affecting a regal style of living and enjoying a luxury and wealth undreamed-of in Europe.



**A TYPICAL BATAVIAN HOME OF THE COLONIAL TYPE: Usually a one-storey building, with a large, well-kept garden, white-walled, and with a wide, shady veranda which is the most frequented part of the house**

**THE ALLIED NAVAL COMMANDER, the Dutch Vice-Admiral E. E. L. Helfrich, who has been hitting the Japs hard in the Indies**

## THE STORY OF JAVA IN BRIEF

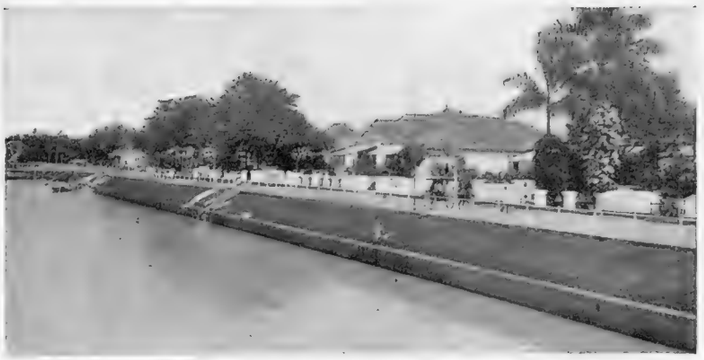
| | A.D. |
|---|---|
| First reached by the Portuguese | 1511 |
| First reached by the Dutch | 1595 |
| Batavia built about | 1619 |
| Batavia occupied under orders from Lord Minto, Governor-General of India, by Sir Samuel Auchmutz — August 26, | 1811 |
| Sultan replaced by the hereditary Prince by the English — June, | 1813 |
| Java restored to the Dutch by the Treaty of 1814, and actually handed over in | 1816 |
| Free labour, instituted under the British regime, abolished | 1830 |
| Mutiny of Swiss soldiers | 1860 |
| Earthquakes very destructive in | 1876 and 1877 |
| Volcanic outbreaks — May, | 1885 |
| Volcano Galoenggoen erupted — October 20, | 1894 |
| Eruption of Volcano Kaloet — May 23, | 1901 |

All this time the neighbouring continent of Australia, with a climate so much more congenial to European people than the torrid heat of the Indies, failed to attract the attention of the Dutch. It was not unknown to them, but it was unproductive and its potentialities were unrealised. Preoccupied with the spice trade, they left it alone, to be developed later, like the mainland of India, by their English rivals.

The town Coen built was situated at the mouth of the River Tji Lwoeng, which provided the only safe harbourage in Western Java during the storms between the main monsoon seasons. In the seventeenth century, however, a volcanic eruption and subsequent earthquakes altered the course of the river, and caused it to bring down great quantities of mud, which spoilt the anchorages. To-day the port is used mainly by small native fishing-boats, while the ocean liners are accommodated five miles to the east, where stone piers have been built into the coastal marshes. The new harbour is linked to the old by road, railway and canal, along which have sprung up in recent times modern factories, turning out artificial batiks, rubber tyres, motor-cars and soap, and foundries producing all kinds of household tools and ironmongery. Here, too, are the sugar refineries and the plants for extracting coco-nut oil from copra and for preparing tea and tobacco for export.

Batavia was planned like contemporary Dutch cities, and it still bears a striking resemblance to Amsterdam in its narrow streets and tree-lined canals and houses built right on the edge of the water. The trees, however, have a tropical luxuriance and beauty unknown to the gawky planes which struggle to exist in the European city. Old houses still remain with floors and roofs of the red tiles so characteristic of Holland, and Delft ware hangs on the walls to recall the famous Dutch masterpieces.

Nowadays, however, an important alien element appears, for a large part of the old town is occupied by Chinese, whose poky shops and eating-houses, hand-carts and jostling streets are entirely Oriental. The mansions which in their heyday housed aldermen and wealthy merchants have now been converted into banks, shipping agencies and even godowns. Marble staircases and magnificent doors and knockers are occasional reminders of past glories. The old town hall is now just another Government office, and its ancient dungeons are refurbished to make air-raid shelters. Rival ports have now made inroads on the city's commercial pre-eminence.

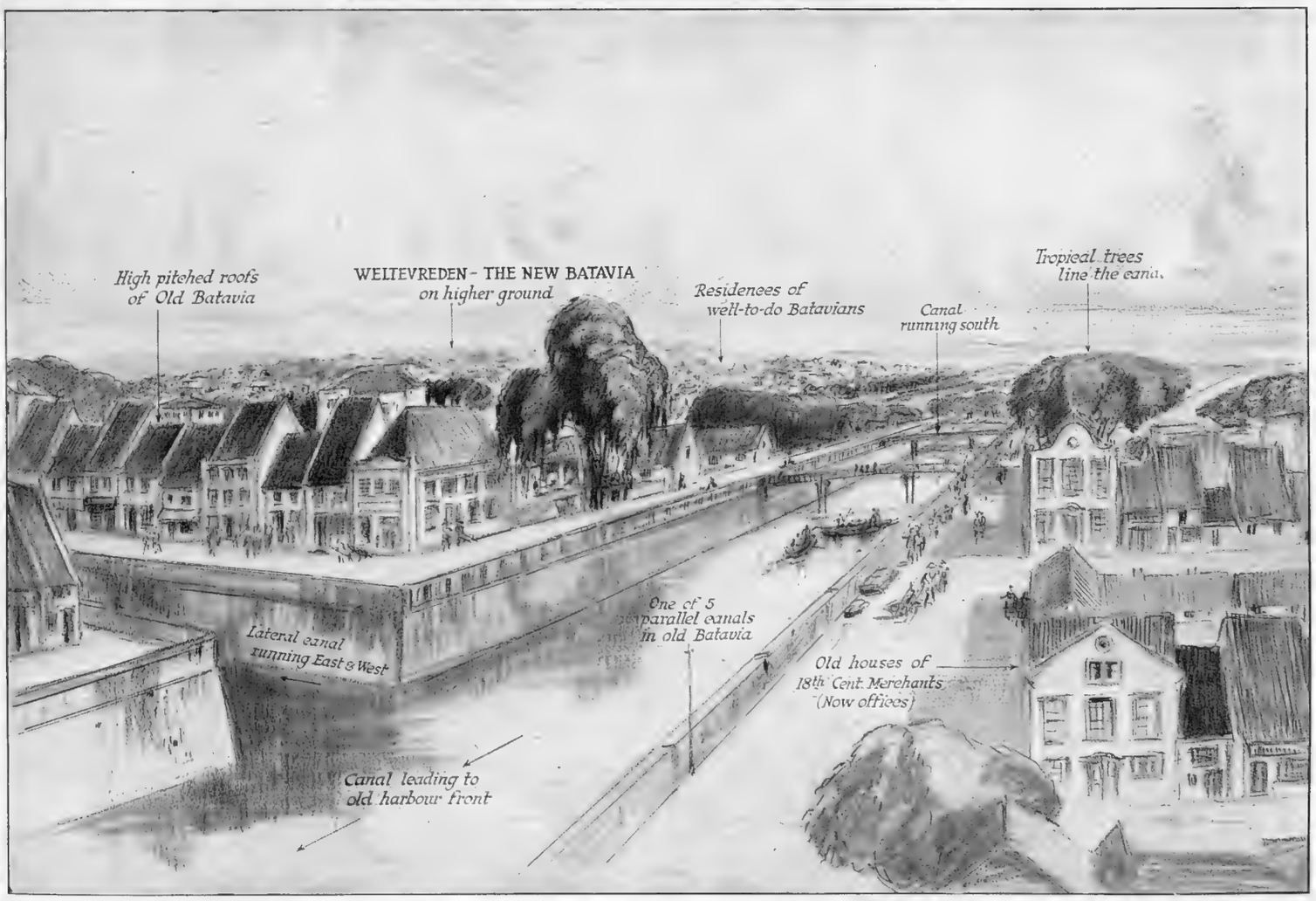


**ALMOST LIKE A SCENE IN HOLLAND: The canal at Weltevreden, the new, or upper, city built by the Dutch colonists at Batavia**

Weltevreden is a city of open spaces, and in the centre is the Koningsplein, which is nearly a mile square. It is almost bare of trees and has little beauty, but it provides a drier air than can be obtained where the vegetation is luxuriant and it allows refreshing breezes to penetrate to the heart of the city. Around it stand fashionable villas and imposing Government buildings, many with striking Greek façades and all solidly built. The new town has other parks and open spaces, and abounds in fine, wide, airy avenues, tree-lined and well shaded from the tropical sun. These and the private parks and gardens naturally cover a considerable area, and the main avenue is ten miles long. In Weltevreden the Dutch have found it possible to live for years on end in an Equatorial climate without incurring serious debilitation.

Their houses are widely spaced and have large, well-kept gardens. They are usually one-storey buildings, white-walled and provided with shutters instead of window-panes. Everything is designed for coolness and comfort. A wide, shady veranda, supported often by classic columns, is the most frequented part of the house. Here in the cool of the evening the elders relax in the inevitable extending basket-chair, with its long arm complete with well to take a glass of gin and bitters.

The Government officials and the Dutch merchants no longer live in the old town, which they evacuated in the nineteenth century. It had always been damp and unhealthy, and they built a new Batavia called Weltevreden (meaning "well content") two miles farther south. In this healthier district they have made their homes and live as permanent settlers. They have dropped those European conventions which are out of place where the temperature is 80 deg. in the shade all through the year.




**A BREATH OF OLD HOLLAND IN THE FAR EAST: The waterways of Batavia recall the placidity of the homeland at every turn in the old city, which has five parallel canals which have been built on the Dutch pattern**—*Drawing by Percy Home*

The Dutchman living in Batavia has adapted his ways to the East to a large extent; he has blended a simple, colonial style on to the architecture of his European homeland. Parts of the old town of Batavia are full of the old city houses of the great planters of the past. Modern tendencies have of late been fighting this happy blend, but, taken as a whole, the effect of the new white buildings is not unpleasing, set as they are among façades which, with their tall windows, scroll-embellished gables and high-pitched, tiled or shingled roofs, recall the façades of the Amsterdam canal thoroughfares. The city is seamed with canals, some of them bridged in typical Dutch fashion; where they differ from the ancient prototype is in the tropically luxuriant trees which here replace the planes of Holland's canal roads. Rich knockers and other external features decorate the older houses, most of which have fallen from their high estate and have become offices or shops. Government has moved southwards to Weltevreden and, like many an eighteenth-century quarter in other cities, the beautiful architecture goes a-begging. It is odd in such surroundings to see the native workers with their conical hats parading the streets, or slowly moving on a barge through the stagnant waters of the canals. The houses are well tended and the domestic life of the Dutch family well run by the native servants, who are diligent workers enough, when tactfully handled

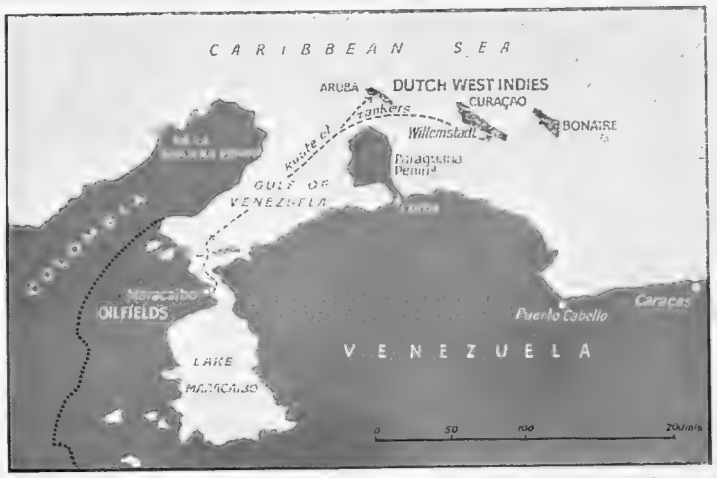
C

# THE WAR SPREADS TO THE CARIBBEAN

**ARUBA, THE OIL ISLAND IN THE CARIBBEAN SEA, where Nazi U-boats have been making a series of attacks on Dutch bases in the West Indies**—*Drawing by E. G. Lambert*

About the middle of February a new place-name suddenly appeared in the war news. It may safely be said that the name Aruba meant little or nothing to the average lay reader, although to the oil world this oil-refinery island off the coast of Venezuela was a very well-known and notable spot. It came into the news by reason of a number of attacks by enemy U-boats. Both Aruba and the neighbouring and much larger island of Curaçao suffered from the attention of one or more German submarines, which had evidently slipped round the island fringe of the West Indies without penetrating the Caribbean.

Aruba is a rather bare, volcanic island of 70 square miles in extent and remarkable to-day for the fact that it contains the largest oil-refining installation in the world. It was this which the enemy submarine attempted to damage with its deck-gun when it first appeared off the island. The U-boat had greater success with its torpedoes, three or four tankers being sunk in the waters immediately around the two islands. The small and thriving town of Oranjstad lies on the southern shore, which is protected by a reef of islets. No oil is extracted from the island itself, the whole of the crude oil being brought from Lake Maracaibo, on the Venezuela coast, and conveyed to Aruba in numerous flat-bottomed tankers. The prowling U-boat subsequently turned its attention to Curaçao, the island which has given its name to a famous liqueur; the chief town of Willemstad is remarkable for the Dutch character of the houses

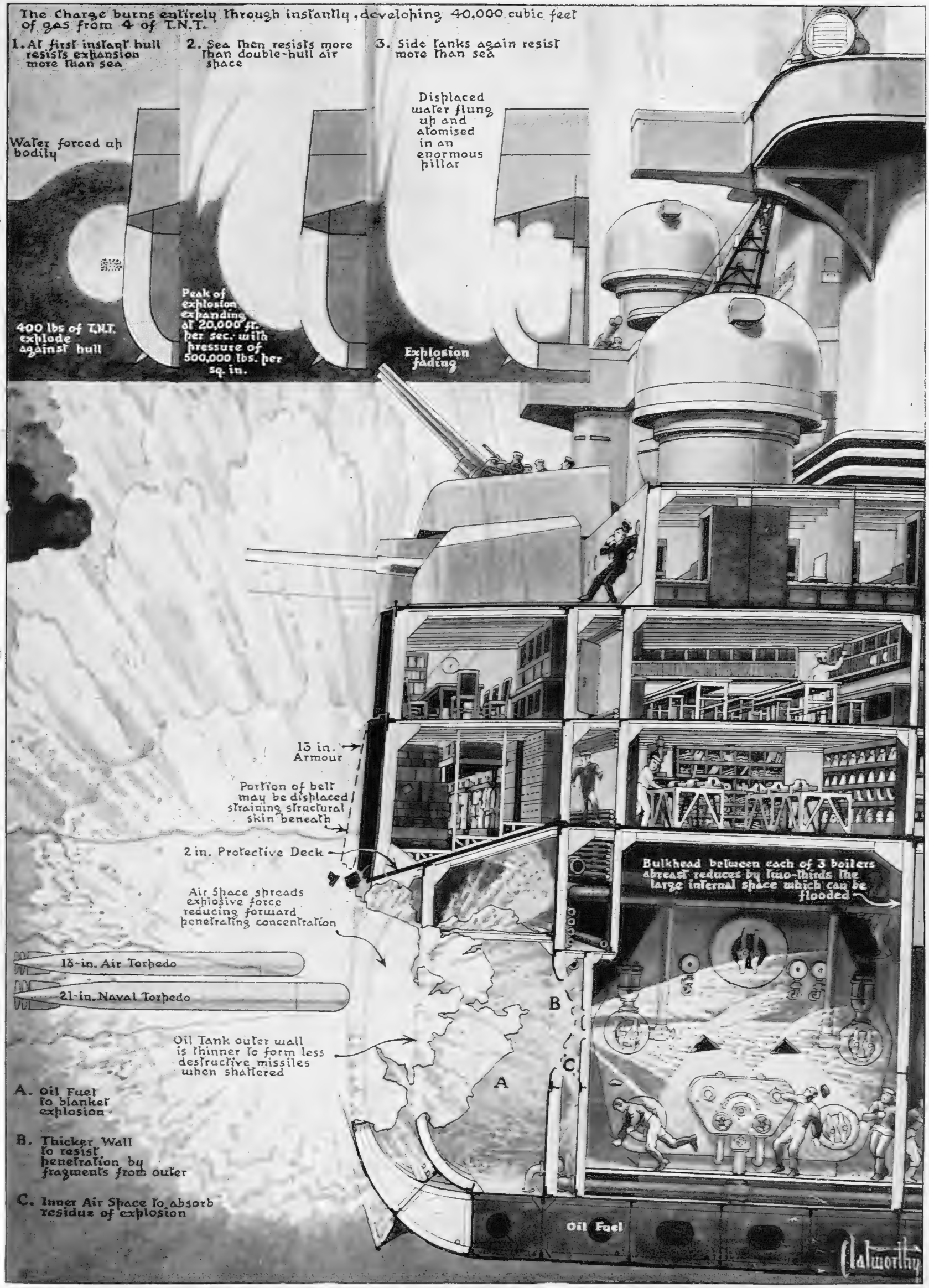



**HOW THE OIL COMES FROM MARACAIBO, IN VENEZUELA, for refining at the Dutch island of Aruba, which is virtually given over to this industry**

**THE CAPITAL OF THE DUTCH WEST INDIES: A view of the bright and up-to-date port of Willemstad, capital of the group of islands, which is situated on Curaçao. (*On right*) Heeron Street, in the heart of Willemstad's shopping-centre:** The island of Aruba, largest oil refinery in the world, is one of the group comprising the Dutch West Indies. Curaçao is the chief of these, and Willemstad its capital. In the latter up-to-date town the Governor resides, and rules over the destinies of the six islands forming the colony

**This page is missing from the print copy used for digitization.**
**A replacement will be provided as soon as it becomes available.**

**This page is missing from the print copy used for digitization.**
**A replacement will be provided as soon as it becomes available.**




**THE TORPEDO IS UNDOUBTEDLY THE MOST DEADLY WEAPON WHICH CAN BE EMPLOYED AGAINST A CAPITAL SHIP:** The destruction it causes is extensive and dangerous, for it literally hits below the belt. This series of diagrammatic views shows how the charge develops and how it is partially checkmated by the construction of the hull—*Drawing by S. W. Clatworthy (Artist's Copyright in the U.S.A.)*—See notes on left

# WARFARE BY TORPEDO

(*Continued from page* 304)

On the question of luck, there is no doubt it has been with us at least once in this war, on the sinking of the *Bismarck*. This brand-new thirty-five-thousand-tonner was dangerously near the safety of the French coast when, for the second time in the hunt, one of our planes defied the hail of flak to score a hit with a torpedo. This time it hit the most vulnerable spot possible, smashing rudder and propellers. The giant ship was left completely helpless to await despatch at the hands of our Fleet.

We pioneered the air-borne torpedo during the last war, with a 14-in.-diameter weapon which even then weighed nearly a ton. At present we use an 18-in. weapon, which can be dropped apparently from a considerable height above the water. It differs from the naval torpedo not only in its smaller diameter, but in being designed for a much shorter run, the plane being able to approach with safety much nearer its prey than the submarine. It still packs a terrific punch, however, as Taranto demonstrated.

The torpedo-plane we had at the start of the war was the rather slow, ungainly but intensely reliable biplane, the Fairey Swordfish, affectionately known to Fleet Air Arm pilots as the "Stringbag." They carried the torpedo naked and unashamed between the undercarriage legs.

They also carried on other official duties objects ranging from mines to leaflets. Unofficially they are credited with having carried everything from beer barrels to motor-bicycles. They have now gone into the limbo officially reserved for non-operational types, having been replaced by a special version of that very efficient machine, the Bristol Beaufort. But whatever successes its posterity may claim, the Swordfish will always bear the premier battle-honour of Taranto.

This war has also seen the further development of a new class of torpedo-carrier, the high-speed motor-boat. These mosquito boats, as the Americans aptly call them, are seventy-feet craft, carrying from two to four 21-in. tubes on the deck. The German version, incidentally, carries an odd-size torpedo of only 19½-in. diameter, which should be correspondingly less effective than ours.

They are expected to be very effective craft under appropriate conditions, but the enemy has so far restrained himself from offering many chances, though no doubt their turn will come. Due to the fact that the enemy makes as little use of the sea as possible for transport, and rarely lets his fleet make a sortie in strength, we have been consistently presented with far fewer torpedo targets than we ourselves are compelled to offer. Still, we have made undeniably good use of those we were offered, and more than that no one is entitled to ask.

**HOW THE AIR-BORNE TORPEDO IS DISCHARGED FROM THE AIRCRAFT: A Beaufort of the Coastal Command drops its deadly missile from a considerable height above the water**

When the air-borne torpedo was first developed during the last war, we perfected a 14-in.-diameter weapon which weighed nearly a ton. To-day the majority of aircraft use an 18-in. torpedo: this can be dropped from a considerable height without the delicate mechanism within being affected. Not only is the air-borne torpedo smaller than its naval counterpart, but it is also designed for a much shorter run, so that the aeroplane can approach its target more closely than could a submarine. When the war began, the Fairey Swordfish was about our only torpedo-dropper—slow, ungainly and known to pilots as the "Stringbag" (the derivation coming, apparently, from "Sindbad the Sailor"!). To-day the Bristol Beaufort is employed on similar duties—but it possesses great advantages over the Swordfish in load, range, speed and endurance. Mainly, the Beauforts in this guise are operated by Coastal Command: the Swordfish of the Fleet Air Arm are, however, still used for areas where there is little room for manœuvre and few advantages to be gained from sheer speed

**IN THE TORPEDO-ROOM OF A WARSHIP, showing how the "tin fish" are stored:** Although the very latest types of battleship are not equipped with torpedo-tubes at all, most battleships and battle-cruisers of the Royal Navy have been designed to employ this deadly weapon. A number of these are carried in a special Torpedo-Room, where experts are on hand to prepare them for instant action

**HOW THE TORPEDO'S WAR-HEAD IS FITTED:** A torpedo costs a very great sum of money. When used for practice purposes in peace time a dummy head is always fitted and the torpedo is eventually salvaged, for further use. But in time of war the top portion of the torpedo is removed and a "war-head," filled with the deadliest of high explosives, is fitted. The above picture shows this process being carried out on board a British vessel

## FIGHTER AIRCRAFT AGAINST DESTROYERS

An Incident during the Passage of the German Battleships Up the Channel, when British Fighters Dived Down to the Attack of a German Destroyer

*—Drawing by Rowland Davies*

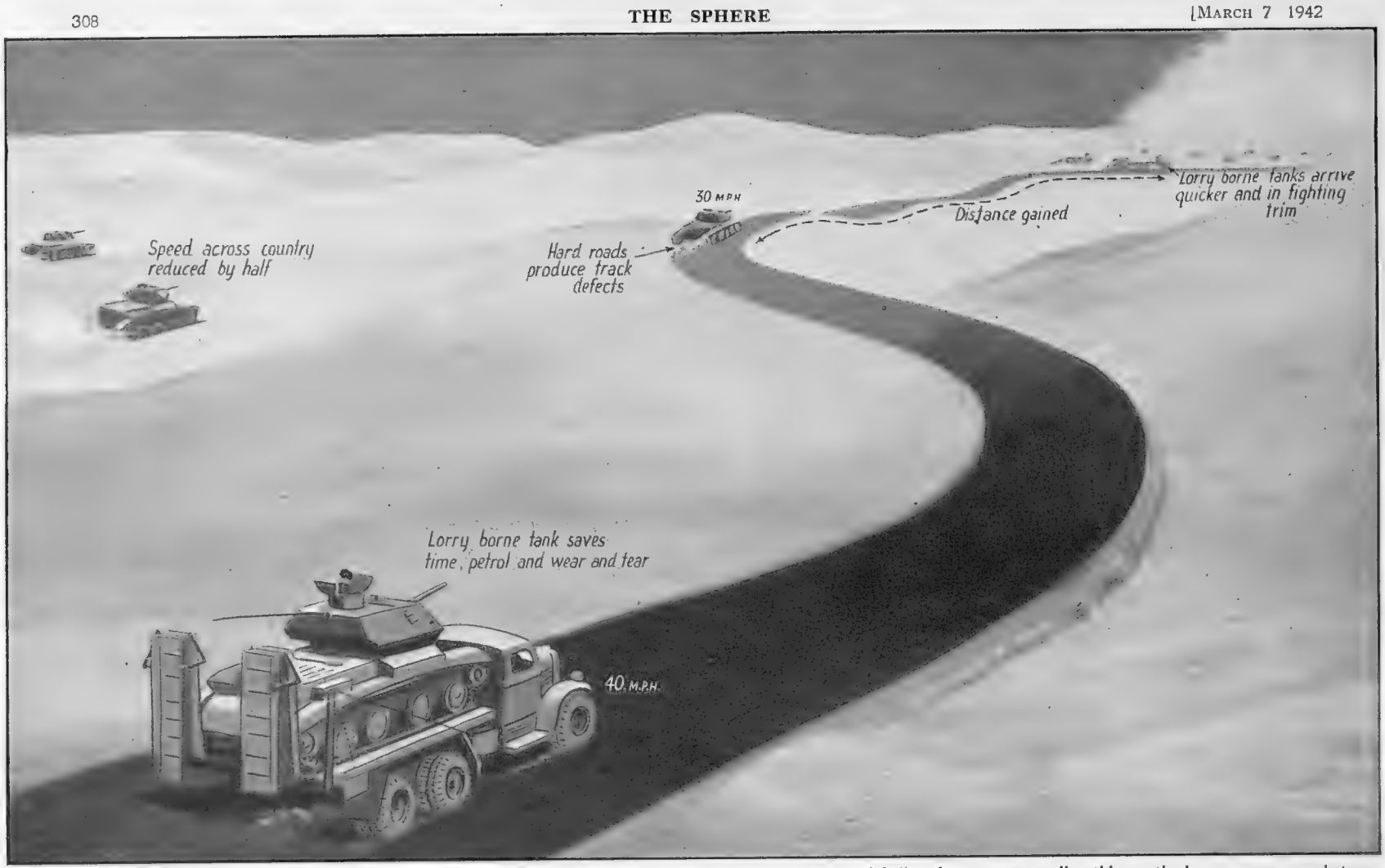
When the *Scharnhorst*, *Gneisenau* and *Prinz Eugen* were escaping from Brest, British fighter aircraft made history in this war by going in to attack one of the German escorting destroyers—the first time that aircraft of this type have engaged a warship of such size! The leader of the Australian pilots who took part thought he was engaging an E-boat! "I took the boys in at her," he said later, "because she was the nearest. It was a bit of a shock to find what she really was, but we let her have it. She fired everything at us, and I got the hood blown off my machine." This is the moment depicted by Mr. Davies in his drawing above. It is significant that as the last of the fighters went in, there was no answering fire from the destroyer, indicating that the anti-aircraft gunners on the enemy warship had been hit—or quit!

## THE SINKING OF A U-BOAT

By the Light of the Burning Victim, a Second Vessel Sinks the Attacker with Gunfire!

*—Drawing by W. G. Whitaker*

This is the story of the biter who was bit, or the attacker who was attacked! A Nazi submarine had attacked a British merchantman and set it on fire. Whilst the first vessel was blazing furiously and lighting up the whole scene, another ship spotted the U-boat. Immediately it went into action against the attacker, who was unable to crash-dive in time. The gunner's shooting was outstanding: his third shell burst on the submarine's conning-tower, and four more shots followed this. The gunner has been awarded the B.E.M. for his fine effort




**TO OVERCOME TANK DEFECTS, these powerful engines of war are now transported into action on special "tank transporters": this method saves wear and tear on the delicate link mechanism which has hitherto been the cause of frequent breakdowns**

It is by means of special lorries that tanks are now conveyed to the battle area, to save wear and tear on their tracks: a considerable amount of time and petrol is also saved by this method. A tank cannot maintain a high average speed on hard roads for long distances without grave risk of track trouble; and if used across soft country the tank's speed is halved. The wheeled lorry can travel at a steady 40 m.p.h., and it can also bring back tanks which need repair at the base

# WHEELS VERSUS TRACKS for the TANK

## The New Ideas Evolved for the Big Fighting Vehicles to Render Them Less Liable to Breakdown

*Described and Illustrated by L. Ashwell Wood*

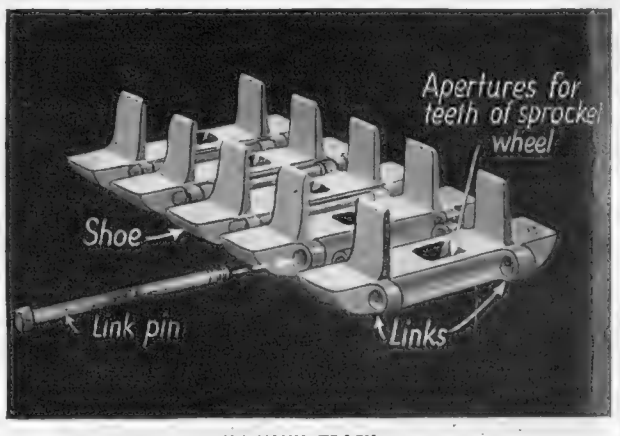
IT is somewhat paradoxical that, at a time when the output of tanks from British and United States factories is growing into a broad and steady stream, the feeling should have arisen that all is not quite well with this powerful war weapon, as it has been evolved to-day. We have seen them photographed on trucks, in long perspective, ready for their journey to the fighting line; their tracks are all new . . . and it is just here that the trouble lies. . . .

The tank, in fact, is not all that it was once thought to be. It does *not* crash through walls, or leap obstacles, or travel hundreds of miles under its own power—if it can help it! Nor does it take to the soft and treacherous meadow or arable lands which lie beside the roads. It is, in fact, a very delicate instrument: and its delicacy arises from its complicated tracks.

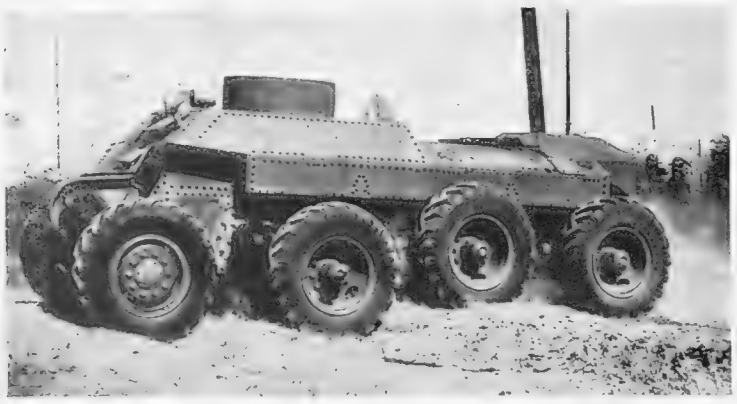
So vulnerable is this supposedly mighty weapon that, at first, its defects were not fully realised. Discussions innumerable have been waged over its armament and the calibre of its guns; but its chief weakness—the track—has, until recently, been ignored! Nevertheless, some designers of armoured vehicles have been so impressed with this important defect that they have turned their whole attention to the problem—and it is now suggested that the linked track be abandoned altogether in favour of the big wheel with colossal balloon tyre.

Under war conditions, the track has shown that, amongst its other limitations, is the impossibility of lubricating moving parts, such as the link-pins, properly. This becomes manifest when a tank has to maintain a high average pace of, say, 30 m.p.h. on hard roads for long distances—the continual slap-slap of the track soon brings about grave mechanical defects. Cross-country running is easier on the machine, but then the speed is reduced to almost half.

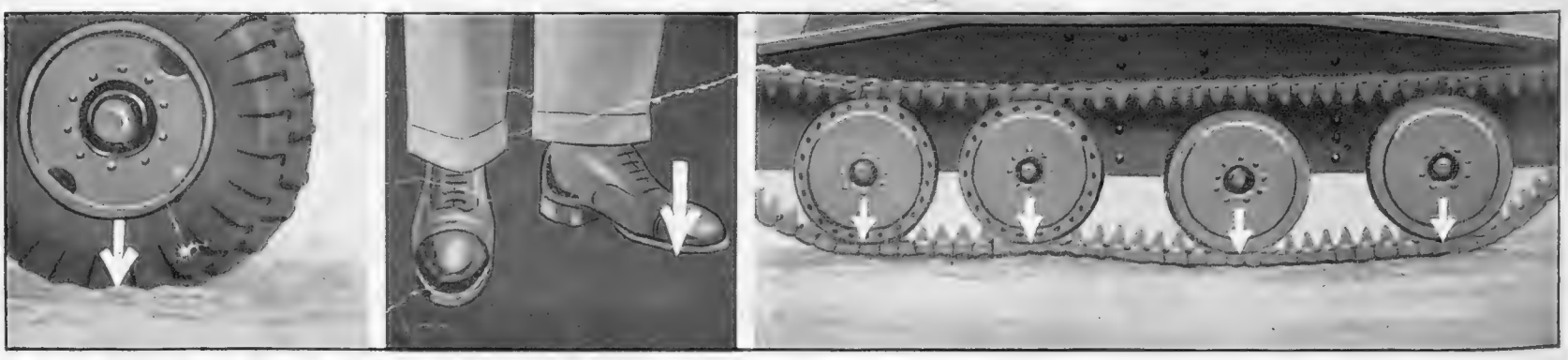
These conditions have brought about an entirely new method of transportation for the tank. The multi-wheeled lorry came to the rescue; and, by it,




**THE WEAK SPOT OF THE TANK TRACK:** Scores of link-pins are constantly under stress when the tank is moving. Any one may produce disaster if it breaks at a critical moment. These parts are impossible to lubricate sufficiently, as they are all independent and moving round



**THE AMERICAN ARMY TESTS A NEW TRACKLESS TANK:** The tests were undertaken at Fort Meyer, in Virginia, before Army officials. It is reported that the latter think that this type might be adaptable for reconnaissance, and that it might be altered slightly to carry more armament. Note the size of the balloon tyres



**THE PRESSURE EXERTED ON THE GROUND BY VARIOUS MEANS OF PROPULSION:** A lorry-wheel bears on the ground with a pressure of 100 lb. per sq. in. The foot of the average man exerts a pressure of about 8 lb. per sq. in. when standing and about 12 lb. when walking. The weight of a medium tank, however, is distributed over the ground at about 6 lb. per sq. in.

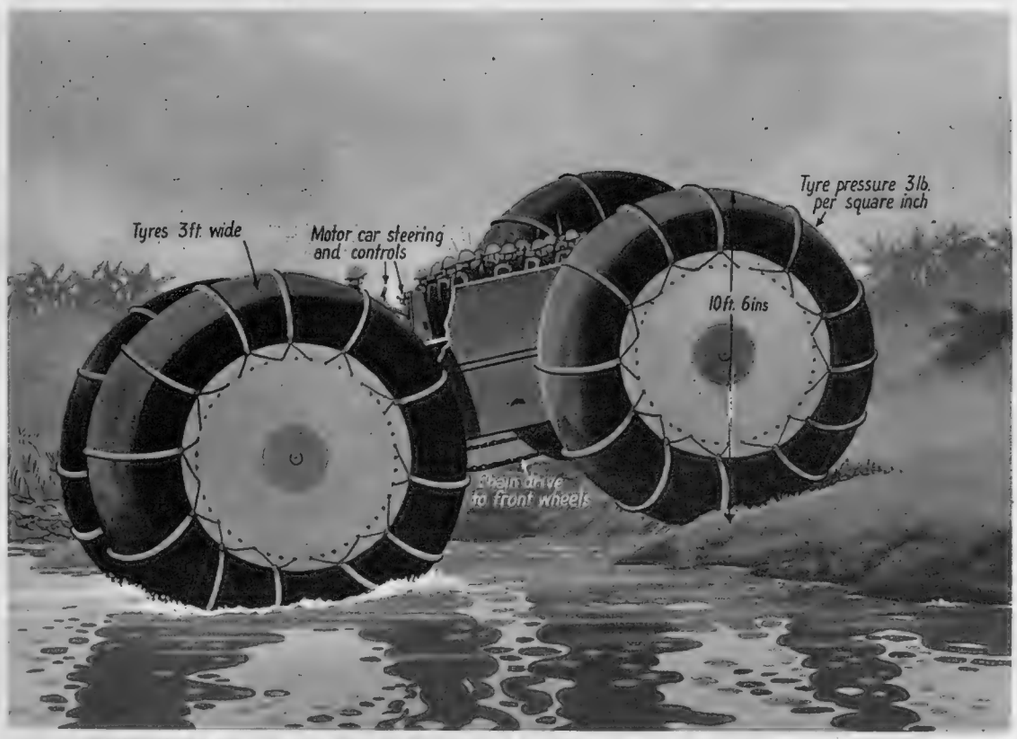
the tank is now transported to the scene of action, saving the wear and tear on the tracks when driving over hard roads. Apart from the importance of keeping these tanks in fighting trim when they arrive, the lorries also mean a great saving of time and a considerable amount of petrol. Tank lorries are now used both by the enemy and ourselves. The American type in use in the British Army weighs over 30 tons when loaded, and has a 130-h.p. engine. Its huge tyres are specially constructed, and a folding steel ramp at the rear enables the tank to be loaded and unloaded with ease. In Libya, these huge lorries can be seen rushing tanks up to the front line, or bringing them back for repair.

As is well known, a lorry-wheel bears on the ground with a pressure that may be 100 lb. to the square inch, but by multiplying the wheels this pressure is greatly reduced, and a higher rate of speed can be maintained than the tank, although the track of the latter bears no more than 6 lb. per sq. in.—very useful in some circumstances. In comparison, the foot of an average man presses on the ground at about 8 lb. per sq. in. when standing, and 12 lb. when walking.

A further use for the big balloon tyre, with bullet-proof treads, now coming rapidly into favour, is the advent of the "trackless" tank. These vehicles are really heavily-armoured cars, and are a cross between an ordinary armoured car and a tank.

The much-boosted German eight-wheeler has already seen much service in the desert: it is a very fast and powerful machine, with a four-wheel drive, the other two pairs of wheels being idlers and weight-carriers. The American eight-wheeler shown in the drawing is entirely new, and its armament a secret. The Russian model has been in use against the Germans on the Eastern Front in considerable numbers. The so-called British Guy four-wheeled tank is really an armoured car, but its appearance is on tank "lines."

An astounding use of ultra-balloon tyres (if one may use such an expression) is the American Marsh, or infantry "buggy." This ingenious machine travels over roads just like a motor-car, through swamps as a tractor and in the water like a boat. Its huge balloon tyres are 10 ft. 6 ins. in diameter, and nearly 3 ft. wide, and they are inflated to a pressure of 3 lb. per sq. in. On land they make springs unnecessary; in the water they give the "Marsh Buggy," which weighs 3½ tons, a draught of less than 2 ft. The power unit is a Ford V-8 engine, with an ordinary gear-box coupled to a tractor gear-box—sixteen gears in all. The front wheels are driven by chain from the back axle. The front axle is pivoted to allow the wheels to rise independently without tilting the chassis. This machine, although designed for engineering purposes, is very useful from a military point of view, being able to carry seventy-five infantrymen. The importance of the wheel is to-day more paramount than ever. The whole military machine is on wheels! The writer predicts the time when the caterpillar track as used on fighting tanks will be a thing of the past, and we shall see fast, heavily-armoured tanks with a diversity of multiple wheels of all sizes. Should one, or even two, wheels give out or be shot away, the vehicle can still carry on; whereas, in the tracked vehicle, one broken link, and the thing comes to a standstill.

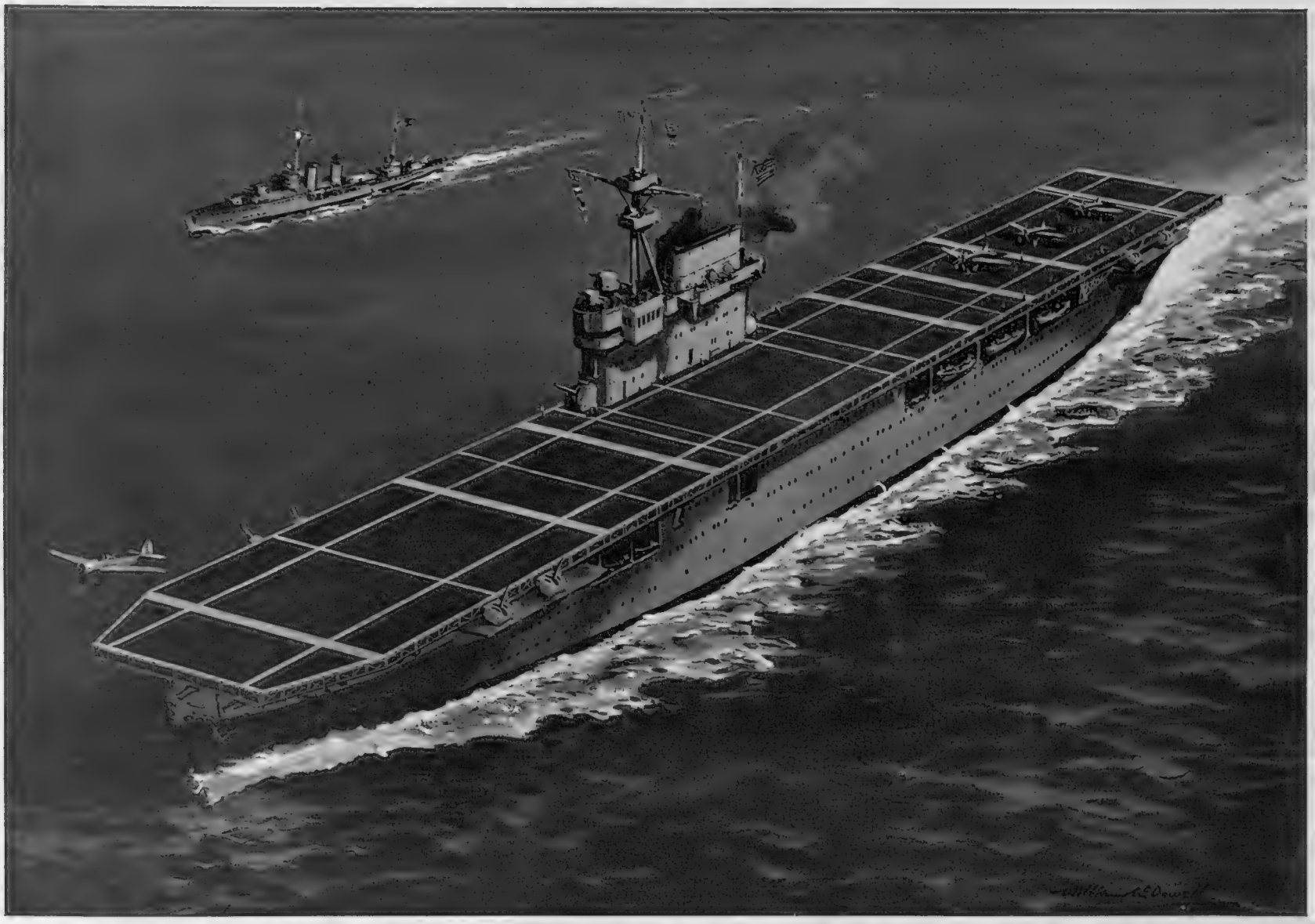



**THE WONDERFUL "MARSH BUGGY," WHICH HAS BEEN EVOLVED IN THE UNITED STATES**

This machine travels over roads as a car, through swamps as a tractor and in the water as a boat. The power unit is a Ford V-8 engine, with an ordinary gear-box coupled to a tractor gear-box—sixteen gears in all. The front wheels are driven by chain from the rear axle. The huge balloon tyres are 10 ft. 6 ins. in diameter and 3 ft. wide: having a pressure of only 3 lb. per sq. in., they render springs unnecessary, and when in the water give the "buggy" buoyancy. When used as an infantry carrier, the vehicle can accommodate seventy-five men—a very considerable number to employ on military operations!

**FOUR TYPES OF TRACKLESS TANKS NOW IN PRODUCTION AMONGST THE COMBATANT POWERS: The British type is a four-wheeler; the Russian is a six-wheeler; and the American and German types are both eight-wheelers**

The advent of the bullet-proof balloon tyre has brought about a type of fighting vehicle which may be described as a "trackless tank." These are really heavily-armoured cars, being a cross between an ordinary armoured car and a tank proper. Their specially-constructed tyres give them great speed and mobility. The German eight-wheeler type has been in use against us in Libya, and several have been captured by the Eighth Army. The armament of the American type is still being kept a secret



**WHAT THE MODERN AMERICAN AIRCRAFT-CARRIER LOOKS LIKE:** An overhead view of the "Enterprise"—sister-ship to "Yorktown." Each of these vessels is of 19,900 tons displacement, has a speed of 34 knots, and carries eighty-one aircraft aboard—*Drawing by Wm. McDowell*

This picture shows the manner in which the flight deck is marked off in lines of varying width and spacing to assist the pilot in both direction and distance when landing or taking off. The aircraft-carrier has a length, at the water-line, of 761 ft., and an overall length of 809 ft. The complement carried, inclusive of flying personnel, is over 2,000. In this type of vessel aircraft can be launched by catapult from the hangar deck as well as from the flight deck, thus increasing the number which can be put into the air at short notice. It is interesting to record that serious mechanical defects delayed the completion of both "Enterprise" and "Yorktown," so that, although launched in 1936, neither was completed until 1938. Each is said to have cost twenty-one million dollars, although the contract figure was nineteen millions. The newly commissioned "Hornet" also belongs to this class, but she is costing no less than thirty-one million dollars

# AMERICA'S AIRCRAFT-CARRIERS

## *And her Sea-borne Fighter Aircraft*

By FRANCIS McMURTRIE

IN aviation matters the United States Navy has been fortunate in always having had complete control of the whole of its air material and personnel. There is no independent Air Force in the U.S.A., the Navy and Army each operating its own aircraft as an integral part of the organisation.

Another advantage enjoyed by the U.S. Navy is the fact that in the Eastern Pacific and Caribbean Sea weather conditions for the greater part of the year are ideal for flying. It is not surprising, therefore, that American naval airmen have a high reputation for efficiency and enterprise.

The United States Navy was not far behind our own in the adoption and development of the aircraft-carrier. Its first unit in this category was the *Langley*, formerly the fleet collier *Jupiter*. Built in 1912, she was completely reconstructed in 1920 with a flight deck and two horizontal smoke-ducts on the port side, with hinged extensions enabling them to be lowered. In 1937 her low speed—under 15 knots—caused her to be removed from the first line and reclassified as a seaplane tender.

Of far more importance are the *Lexington* and *Saratoga*, the biggest and most heavily-armed aircraft-carriers in the world, with a displacement of 33,000 tons and a speed of over 33 knots. Each can carry from 80 to 90 aircraft, this being made possible by stowing a considerable proportion of the planes on the spacious flight deck, 880 ft. in length and from 85 to 90 ft. across. It had been intended to take these two ships in hand for extensive reconstruction and modernisation at a cost of $15,000,000 for the two, but events have conspired to postpone this project. Originally these two ships were designed as battle-cruisers, but after the last war they were replanned and completed as aircraft-carriers.

There are two small aircraft-carriers, the *Ranger* and *Wasp*, of 14,500 and 14,700 tons displacement and

**HOW AMERICAN FIGHTER AIRCRAFT ARE SECURED ON THE DECK OF AN AMERICAN AIRCRAFT-CARRIER—with their wings folded *upwards* like a grasshopper**—*Drawing by Wm. McDowell*

Unlike the aircraft on a British carrier, many American types fold their wings upwards. By this means a great number of aeroplanes can be stowed on the flight deck itself ready for a very quick take-off. To accommodate the aircraft, thousands of sunken hooks have been fitted to the deck: these can be hinged up to attach to short lines to hold down the plane

**THE SEA-BORNE AIRCRAFT RETURNS TO THE CARRIER: Wheels down for the deck landing; pierced flaps down to act as brakes; arrester hook down to shorten the landing run**

29 and 30 knots speed respectively. Each is able to stow from 72 to 80 planes. They are somewhat eclipsed by the *Enterprise*, *Yorktown* and *Hornet*, sister-ships of 20,000 tons which normally accommodate 81 aircraft and can, if necessary, take over 100. Their speed is 34 knots. All five of these ships mount the same armament, eight 5-in. guns, as compared with eight 8-in. and twelve 5-in. in the *Lexington* and *Saratoga*.

There are under construction or on order eleven more aircraft-carriers, which are to be the "last word" in this category. They are expected to be of from 25,000 to 26,000 tons, with a speed of at least 35 knots and an armament of sixteen 5-in. guns. Their normal complement of aircraft will be about 100. Names assigned to these formidable ships are *Essex, Bon Homme Richard, Intrepid, Kearsarge, Bunker Hill, Oriskany, Ticonderoga, Franklin, Cabot, Hancock* and *Randolph*.

In methods of operation American aircraft-carriers do not differ appreciably from our own. Planes fly off and land on the flight deck in just the same fashion, being pulled up on landing by arrester wires stretched across the deck, which engage in a hook underneath the machine. Nor are aircraft equipped very differently, either bombs or torpedoes being carried by those designed for offensive purposes of this kind. In peacetime, decks are marked out in white to facilitate landing, but it is doubtful if these marks are retained under war conditions.

Another peacetime device is to paint recognition letters on the flight decks, these being *LEX* for *Lexington*, *SARA* for *Saratoga*, *RNGR* for *Ranger*, *EN* for *Enterprise*, *YT* for *Yorktown*.

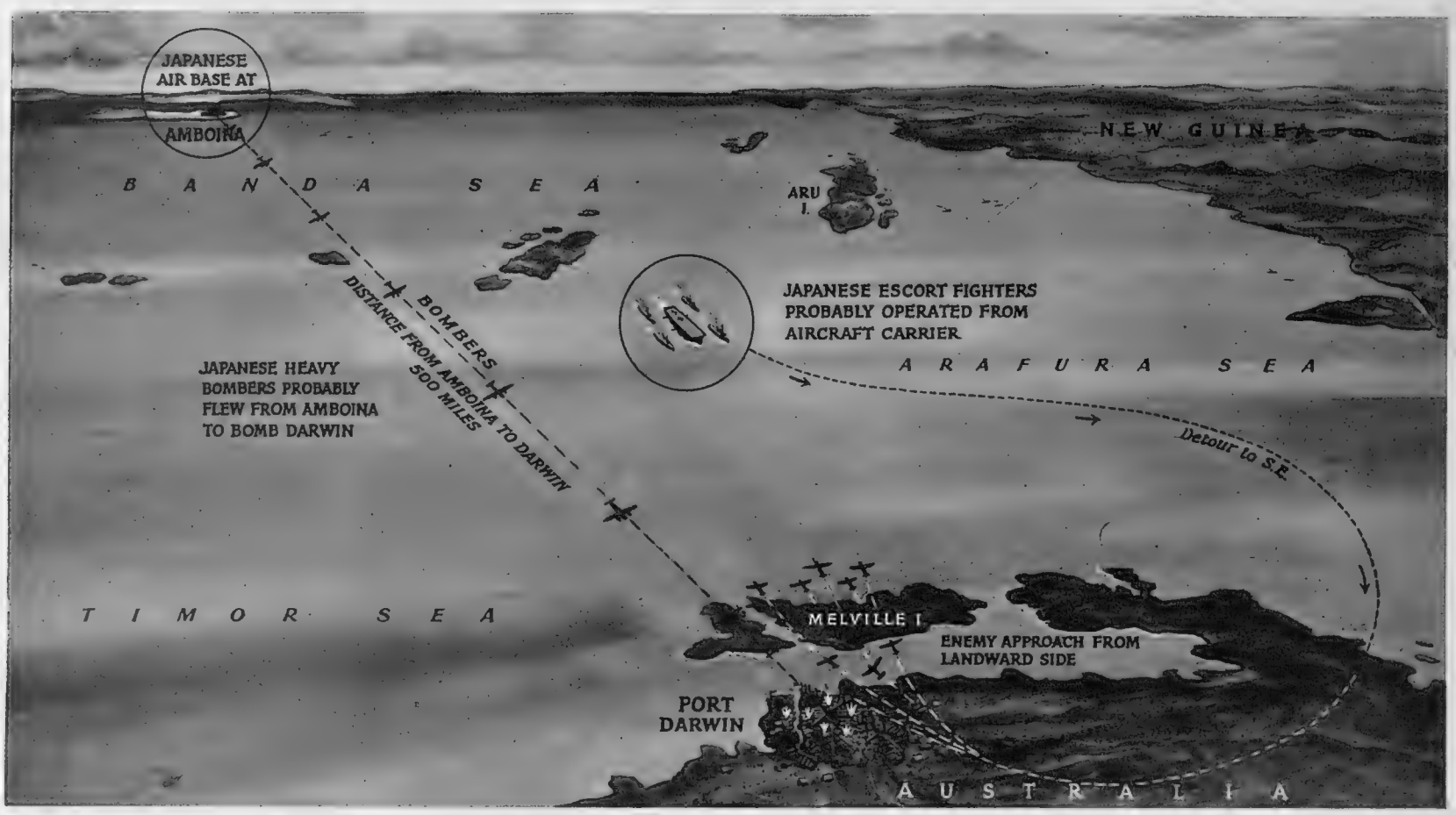
Two types of naval aircraft based on the U.S. aircraft-carriers are the Devastator torpedo-bomber and the Vindicator dive-bomber. The former is now the standard torpedo bomber of the U.S. Navy; it is made by the Douglas Company, the huge aircraft concern which is responsible for the world's best-known long-distance passenger aircraft. The Devastator is a three-seater, the performance of which is still secret. The Vindicator dive-bomber is constructed by the U.S. Navy. Both these aircraft are of the "grasshopper" type, with wings which fold upwards—that is, in the manner shown in one of the accompanying illustrations. The portion of the wing which lifts is raised by mechanical means from the pilot's cockpit.

Deck handling of the aircraft has been speeded up considerably by this means. The method of packing aircraft on the deck by means of hooks has also meant that the planes can be flown off the big flight deck very quickly. It is stated that aircraft secured in the manner shown in our illustration can be left quite safely on the flight deck whilst the ship is under way. As the Americans are very keen on formation flying at sea, this is a great help in operational work.

**AN AIRCRAFT-CARRIER OF THE U.S. NAVY AT SEA: Showing how the aeroplanes are lined up on the wide flight deck of the "Lexington," an American carrier completed in December 1927**

**THE LATEST U.S. AIRCRAFT-CARRIERS ARE CAPABLE OF PUTTING FOUR SQUADRONS OF AIRCRAFT INTO THE AIR within a very short space of time. The above drawing gives a visual impression of what this great number of aeroplanes means**—*Drawing by Wm. McDowell*

*Enterprise*, *Yorktown* and the recently-commissioned *Hornet* were all designed to accommodate 81 aircraft, and it has been stated that they have space for an even greater number than this. Actually, four operational squadrons of eighteen machines each and four non-operational aircraft are carried. The Americans have had considerable experience of flying over the sea: their fighter formations have been specially trained to manœuvre together in squadrons and to carry out concerted operations

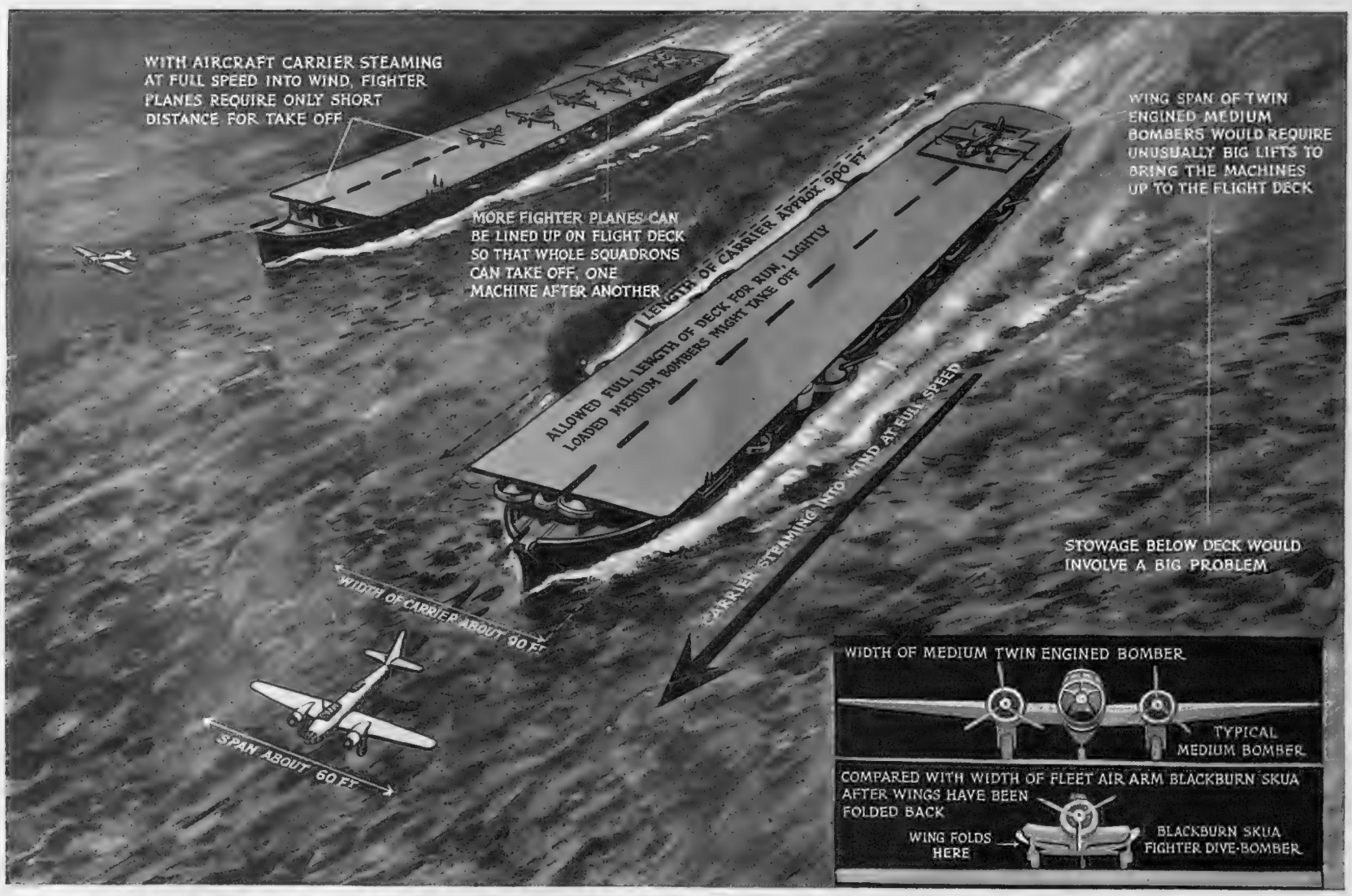



**IN THE BOMBING OF DARWIN, ON THE NORTH COAST OF AUSTRALIA, the Japanese bombers were escorted by fighters. Even flying from Amboina, the Japs must have had a long operational flight across the sea: the escorting fighters must have been flown from an aircraft-carrier and met the bombers at an agreed rendezvous. The enemy force came in over Darwin *from the south-east!***

# THE BOMBING OF DARWIN

That the Japanese have been able, at this stage of the war, to raid Darwin, on the Australian coast, is not surprising—considering that they are believed to have established an air base at Amboina. But what is surprising is that the bombers were escorted by fighters! These latter machines could hardly have operated from land unless they had been fitted with extra petrol tanks specially for the job, for Amboina is over 500 miles away from Darwin. The circumstances seem to point to the presence of enemy aircraft-carriers off Australia, whence the fighters flew off to meet the bombers at a pre-arranged rendezvous. In the war in the Pacific, where great distances separate the various theatres of operation, great use is being made by the Japanese of their carriers. Fighters and small dive-bombers operate from these with ease. What are the chances of flying off medium twin-engined bombers, with their bigger load of destruction and greater range?

The bomber needs a long run to take off, and even if the bomb-load could be reduced to keep the weight down there is still the problem of stowage and lifting on to the flight deck. Planes used by our own Fleet Air Arm have folding wings which take up a minimum amount of space below deck. Provided that the carrier is steaming into the wind, light planes of the fighter class require only a short length of deck for a take-off, and therefore a number of machines can be on deck at once and take off in numbers. In the case of bombers, the whole deck would be required, to make the run as long as possible; and after each plane took off the business of bringing up the next machine would have to be undertaken. The wing-span of the bomber, too, would not help matters during the take-off run, even on Japanese carriers, which are, in many cases, devoid of any superstructure; and if the bombers had to return to the carrier, full deck-landing equipment would have to be fitted.




**COULD THE JAP BOMBERS, INSTEAD OF COMING ALL THE WAY FROM AMBOINA, HAVE OPERATED FROM AIRCRAFT-CARRIERS? This possibility is here envisaged in a series of drawings which shows how such a thing might have been accomplished despite the great difficulties involved**—*Drawings by Roland Davies*

# THE WAR AND THE WOMAN WORKER

## *Problems which Confront the Minister of Labour in His Task of Grading Women for the Munition-Factories*

Described by CHARLES GRAVES

I HAVE just been over two factories belonging to one of the biggest armament firms in the world. There is no doubt about it, the munition-workers in most factories work tremendously hard and tremendously long hours—7 a.m. to 6 p.m. or 7 p.m. to 6 a.m. is not unusual. And everyone plugs away as if his or her life depends upon it—as indeed it does. Grandfathers and boys of fifteen or sixteen vie with white-haired old ladies and young married women. The forge room reminds one of the Witches of Endor; and the way the men insult red-hot iron, banging it about with giant hammers, or carrying it unconcernedly, just as if it were a box of chocolates, in their tongs, is a revelation.

Guns of all nations are being made in England: the Bofors from Sweden, the Oerlikon from Switzerland, the Besa from Czechoslovakia, the Browning from the United States, not to mention the Hispano-Suiza. Every day the aggregate output is stepped up. Every day more workers are recruited, trained and graded upwards. And with the increasing demand for labour, woman-power is becoming more and more important.

Statistics show that there are 17,000,000 women in Great Britain and 9,000,000 children. At the outbreak of war, 4,000,000 women were employed. To-day there are 300,000 in the Services, and it is hoped to obtain another million for making munitions before the year is out. To-day there are 3,500,000 people engaged in the munitions industry, and these numbers are increasing at the rate of 200,000 every three months. Of this number, 809,000 are women.

In the making of chemicals and explosives, there are 17,000 men and nearly 13,000 women. In the electric cables, apparatus and lamps division, the women actually outnumber the men—48,000 to 39,000.

It has been found that women prefer the morning shift to the night shift, though there are some exceptions in the case of married women, who do not mind going on the night shift when they know that their husband is at home looking after the children in their absence.

The two main problems that confront Mr. Bevin are the shortage of machine-tool setters of all classes, and the shortage of tool-makers and centre-lathe turners. All the time, substitute labour has to be found and trained and graded up to more skilled work. In most places the shop stewards are helping to train the women, who have already received preliminary training at technical schools and G.T.C.s (Government Training Centres). According to the regional Technical Officer for London, he does not recognise any difference in the sexes when it comes to munition-making. There are three forms of transfer. One is when a parent firm has put up a dispersal factory—in which case the munition-workers would be making the same products, but probably with more up-to-date tools. The second is when a completely new factory has to be staffed. The third is when the extension of an existing factory has to be staffed.

The process of upgrading goes through four phases. You start with green labour. These industrial recruits proceed to simple machine operating under a setter—in other words, a supervisor. The next stage is when they become setter-operators, doing simple operations for themselves. The fourth is when they start setting for multiple operations and become setters for others. Already there are about fifty women doing this.

In London alone there are over twenty Technical Schools, with fifteen more in Kent, Surrey and Sussex. There are also seventeen Government Training Centres in London. These have anything from 252 to 300 trainees, compared with the 12 to 60 in Technical Schools.

Much as managements may dislike it, part-time labour is inevitable. The supply of part-time workers comes from four main sources: (1) married women; (2) Civil Defence workers; (3) Old Age Pensioners or disabled people; and (4) part-time volunteers who have given up their leisure. It is mainly provided by married women whose domestic responsibilities make it impossible for them to offer their services full time, but not heavy enough to occupy them for the whole day.

Very many women go into part-time work for the brutal reason that, if their husbands are in the Forces, they literally cannot live properly on their allowance.

The pity of it is that someone invented the phrase "shadow factory." This has had a very bad psychological effect. The workers of these shadow factories regard themselves as shadow workers, and do not always take the interest in their work which they would otherwise do.

Among the problems provided by married women who do part-time work is that their children may get colds, or more lengthy and tiresome infectious diseases like measles, chicken-pox, or mumps. In such cases a mother may not turn up at a factory for a fortnight or more, and no one can blame her for not doing so. Again, husbands may come home on leave from the Forces, whereupon wives usually find this an adequate excuse for staying away from work.

Shopping also constitutes a problem which leads to bad timekeeping. This occurs only with women working on full time. To reduce absenteeism on this score, many firms have permitted women to leave work for a few hours for an afternoon's intensive shopping each week, and have immediately had improvements in timekeeping.

In some cases the hours of work are sufficiently exceptional to deserve notice. The part-time workers in one firm found that they could manage longer hours (from 7.45 a.m. to 4 p.m.), with a break of three-quarters of an hour for lunch, instead of from 7.45 a.m. to 12.45 p.m., as was originally contemplated.

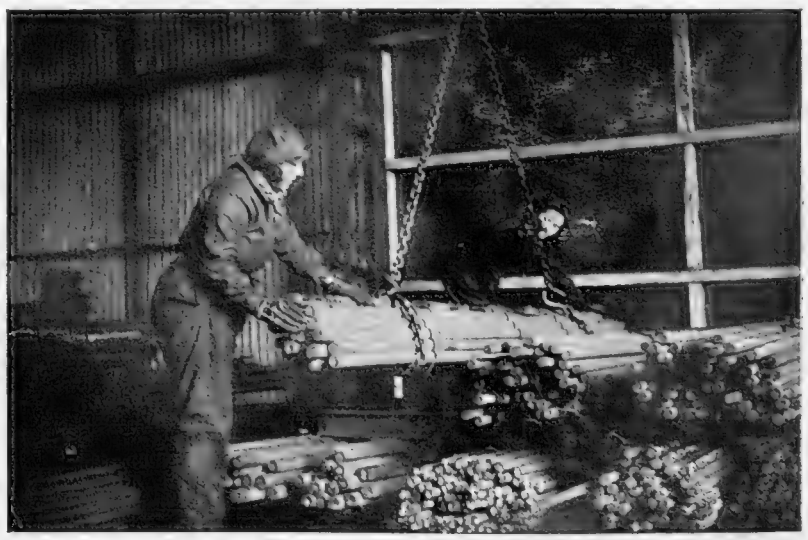
In many cases, part-time female workers are wives and relatives of men employees. The husbands insist that wives should work in the same department as themselves, and this appears to be a satisfactory arrangement.

But look at the position. Hitler has over 2,000,000 slaves working for him on the Continent, in addition to the millions of German munition-workers. We have a population of 48,000,000, including the blind, the halt, the lame, the very old and the very young. We are also maintaining the biggest Armies, Navy and Air Forces in our history. To be able to compete with the enemy's war effort, it really looks as though everyone should be a conscript between the ages of sixteen and sixty, and paid a basic wage, whether machinist, reporter, housemaid or managing director.

In the meantime, the Prime Minister's appeal for "the last spasm of our strength" rings desperately in our ears. The Ministry of Labour is wisely dividing its campaign into three parts. Women who are free to leave home at once are asked to volunteer immediately for work in Midland factories to make aeroplane engines or fill shells. The lowest starting rate at any of the factories is £2 3s. for women of twenty-one or over, a sum which should rise to at least £3 a week after the first fortnight. Lodgings are found for the workers. Those women who cannot possibly leave home are asked to take over younger women's jobs in food shops, workers' restaurants and important offices which could easily be staffed by older women. Finally, neighbours are asked to come to a Box and Cox arrangement whereby one woman looks after the other's children and the other takes a job. Thousands of women have already made plans of this sort. But the cry continues for still more.

**THE WOMEN HELP TO BUILD OUR SHIPS:** These women are now working a 54-hour week: they actually build corvettes and other craft, carry out welding and paintwork and riveting, dig gunpits and repair roads in the yard, drill and cut metal. There is a special gang of women for heavy work, too! The majority are married, with husbands in the Navy or Army, and nearly all of them have children. Miss Stevens, who is shown above, has had two years' service in the Women's Land Army; but welding on a corvette is much more important work

**WOMEN AT WORK ON THE COINAGE AT THE ROYAL MINT:** For the first time in the history of the Mint, women are now being employed in the manufacture of the new coinage. Since June last they have been filling the places of the younger men, until to-day fully a quarter of the workers are women. The first women and girls were trained for the Press Room, where the coins are struck, since the work there is fairly light. At the outset they were put on the "Overlooking Machine" (above), with its slowly-moving belt, on which the finished coins are spread for final inspection



**WOMEN IN THE STEEL-FOUNDRIES WORKING ALONGSIDE MEN:** In one big steelworks in the north of England some 500 women are engaged as oxy-acetylene flame operators, rolling-mill operatives locomotive-drivers, and in other capacities; and at the blast and open-hearth furnaces they are now unloading scrap and are in charge of Diesel loco engines. The two women seen above are (on left) Mrs. Irene Hill, aged twenty-four, a domestic servant before her marriage; and (on right) Mrs. Beesley, aged twenty-eight. They are now loading bars of special steel for armament- and aircraft-factories

# MEMORIES OF FIFTY YEARS—

## An Experiment in Autobiography—V

**By J. G.**

"CHOOSING A HOUSE."—My father's income, never large, gradually increased, and he grew tired of inspecting and renting holiday houses, and craved for something of his own for such uses. Perhaps he brought disillusionment upon himself. I have referred to his engaging characteristic of conservatism, which in truth was the result of his lack of resourcefulness and of the spirit of adventure and experiment. If he found a collar or a collar-stud, a pipe or a nib. which suited him, then and thereafter no other collar, stud, pipe or nib existed—for him (or anybody else if he could have his way). Invention died at that point, and nothing new would do. He had found perfection and asked only to enjoy it.

He was brought up with railway trains, and therefore accepted them as practical politics. But though he lived with telephones, motor-cars and wireless, all at an advanced stage of perfection, for periods ranging from thirty to fifteen years, he never accepted them as really efficient. He personally never telephoned or received a telephone message in his life, and though, of course, he owned a car at times, he never banked on its doing the job planned for it, and he turned his back on the wireless because his fingers *would* not move the knobs, which might have provided a solace in the loneliness of his last years. And as with collar-studs and cars, so with houses.

He himself always took on the job of finding us a holiday house. If the first he saw satisfied my mother's minimum conditions of hygiene, that house was the only house available. He closed with the offer and returned to London, satisfied with his bargain. Nor did experience of his family's criticism ever modify his *idée fixe*. It was exactly the same when he set forth to buy a freehold. We suffered for many years under the ownership of one truly monstrous, and one far from comfortable or convenient, lesser country house. To neither could we ever give the name of "home," or the affection due to that name. Always our memories and experiences of country life had their origins in the suburban and the Sussex manor-houses of our relations, where, of course, we felt ourselves to be "next best to being at home." Indeed, the one thing lacking for perfection denied us there, was the right to drive in nails, and set up sheds, and generally to contrive, and to comport ourselves, in the manner of Heath Robinson and in a carpenter's shop.

**Schooldays.**—I shall waste no words on my schooldays. This is a contentious subject to deal with in the changing social scene of the early 1940's. The Old School Tie is hung on the line of criticism, and the winds are twisting that striped ribbon into a note of interrogation. What do I think of the conventional three rungs to Parnassus, Wixenford, Eton and Oxford (or what you will)? What answer have I to-day to the schoolmaster who poses me with: "What other form of education *can* you suggest?" I can only make these tentative observations. I went to a "fashionable" private school and to a good public school, and I spent four years at Oxford, at a total cost to my father of about £3,000. To this day I cannot estimate the percentage of responsibility which I must bear for the poor results of that expenditure. I am quite certain that it was not an overwhelmingly large percentage. The fact remains that I left Oxford, after taking a low class in Honour Moderations and in Law Final, with gaping joints in my armour of general education. Of English history I knew all too little, of the history of other nations almost nothing. Of English grammar, and syntax, punctuation, and generally of *ars scribendi*, not even the first childish principles: of geography and mathematics, far less than my twelve-year-old daughter knows to-day. Of natural history and science the very minimum, and that minimum not acquired at school. At the end of my second year at Oxford I had already forgotten most of the Greek I had painfully acquired in the VIth Form; and all the small change which I carried away after cashing that £3,000 cheque was a genuine love of the poetry of Virgil, and some facility for apt quotation from Horace, together with a surface grounding in Roman Law and the laws of contracts and torts. I wasted my time, certainly at Oxford, probably at school. But I was not alone to blame for the sorry results of my education.

I am not prepared to say that my school and university days were the happiest time of my life. Indeed, I am well aware to-day that they were not; but perhaps, while they lasted, I had the hope and the faith (faint enough, no doubt) to expect that, if I lived, I should know days of more solid, sober confidence, peace of mind, *happiness*.

"The Happy Days?"—When as schoolboys we came home for the holidays, middle-aged uncles, glancing sentimentally at their second glass of port, would sometimes address us in this sense: "Ah, my boys, how I wish I was your age. God bless my soul, there's no time like youth. . . . Ask your father to pass the port." And it was ours to listen and to obey, and to wonder whether Uncle George was not perhaps rather an old footler.

There are certainly two schools of thought on this subject, and Uncle George's view was and is by no means universally supported by middle-age.

Max Beerbohm, for instance, mercilessly blows the gaff on the idyll of youth in his tantalising essay *On Going to School*. Nothing I have ever read, unless it be *Vice Versa*, so reconciles me to the passage of years; and I am not unmindful, too, of Gibbon's stately periods: "I am tempted to enter my protest against the trite and lavish praise of the happiness of our boyish years, which is echoed with so much affectation in the world. That happiness I have never known."

And then I remember the great Lord Salisbury's letters from school, and his later confessions, so graphically brought out by Lady Gwendolen Cecil. Nothing in the literature of youth tells a more poignant tale of the misery of being young.

It is true that at first sight middle-age is largely spent in filling up cheques and printed forms, and that this practice, if persisted in, is apt to induce a depression of spirit. But diffidence as to one's material resources is not half so great a torture as diffidence as to one's mental resources, and therein lies the key to the youthful pessimism of Gibbon and Lord Salisbury.

To all but a minority of hearty, self-confident, thick-skinned or bumptious boys, the years of adolescence hold long periods of torture.

The heart of a normal boy is soft, his sensitiveness acute. Like a delicate instrument, he is sharply responsive to atmospheric conditions. And every buffet from life makes a mark on his tender skin. Because he has no obvious niche in the world, he fears criticism, because he is reaching the age when he must experience sex-love he is morbidly anxious to be regarded seriously; and because he will be for some years to come the unwilling victim of ambition, he is tortured by discouragement and disparagement.

The figure which he cuts in the eyes of others is all-important to him, and it follows that hardly a night passes but sleep is preceded by a pillow review of the day's disasters, a *faux pas* here, a *gauchérie* there, and overheard and distorted criticism, a slight tenfold magnified. There is nothing, not even among blind puppies or baby mice, so profoundly touching as a schoolboy in his first stick-up collar.

But if at any time in his life a man should be at pains to set down a right judgment, and to correct overstatement, that time should come when, in late middle-age, he writes down his experiences of living.

I think we are inclined to over-sentimentalise in our views about youth, its vulnerability, and its tragedies. Childhood and youth have one great advantage over age and maturity—recuperative power, elasticity, the ability to forget current ills, the power to switch over to a new interest (call that advantage by whatever label you choose). If the tragedies of childhood and youth are many and bitter enough while they last, they are usually short-lived, and are constantly relieved by brief or long interludes of sunshine. If, probing back into past experience, I am often resigned to middle-age, I do not forget those frequent and golden interludes in my impressionable youth.

**(The next article in this series will be published in the issue of March 21)**

**IF WINTER COMES, CAN SPRING BE FAR BEHIND? . . .** When the cameraman visited the lambing fold of a farm in Hampshire he saw this flock of lambs only a few days old. The stampede was a real one, and its object—to get close to Mary who, in this case, is the woman who deputises for the shepherd. Mary (that is *really* her name) spends most of her time with the sheep and the lambs, and they make a bee-line for her whenever she appears!

**KEEPING THE SEAT WARM UNTIL HIS MASTER RETURNS:** This appealing picture comes from a Fighter Station of the R.A.F. The pilot has gone on an operational flight, but his dog keeps his seat warm until his master returns. The latter's book is open at the right place, the fire is burning brightly, spare flying kit dots the room—and woe betide anyone who tries to appropriate the pup's chair!

# PICTURES FROM LANDS OVERSEAS

**THE FIRST "AID TO RUSSIA" DEMONSTRATION IN AUSTRALIA :** This picture comes from Melbourne, a city notable for the number and variety of its street processions to celebrate all kinds of occasions. It shows the first "Aid to Russia" demonstration ever held in the Commonwealth. The scene here is the intersection of Flinders and Stanton Streets : a decorated car bears portraits of Stalin and Churchill, whilst two men carry an outsize picture of Marshal Timoshenko on the left

**AN AUSTRALIAN V.C. RETURNS HOME :** Lieut. Arthur R. Culter is here seen on arrival in Manly, his home town in Australia, where he was accorded a big welcome. He was awarded the Victoria Cross for "unparalleled courage" in the Syrian campaign, in the course of which he lost a leg

**MALTA'S NEW G.O.C. HAS A NARROW AIR-RAID ESCAPE :** Only a week after his arrival the new G.O.C., Major-General D. M. W. Beak, V.C., D.S.O., M.C., had a miraculous escape when his house was directly hit by a 1,000-lb. bomb. The General was at home, and the bomb passed within a few feet of him as he went through his bedroom door. Nobody was injured ! This picture shows the damaged house, with the General's bedroom on the left

**THE NEW G.O.C. IN EGYPT—LIEUT.-GENERAL R. G. W. H. STONE, D.S.O., M.C., with his wife in the garden of their home in Cairo. He was, up to the time of his new appointment, Chief of the British Mission to the Egyptian Army**

**THE CAPITAL OF FREE CHINA ON SUN YAT SEN'S BIRTHDAY :** A view of the crowds thronging a street in much-bombed Chungking, the capital of Nationalist China and the headquarters of General Chiang Kai-Shek, on the occasion of the birthday of Sun Yat Sen, founder of the Chinese Republic. In celebration of the event, the streets were gaily decorated with banners

**IN COMMAND OF THE TENTH ARMY IN IRAQ AND IRAN—Lieut.-General E. P. Quinan (on left) with General Wavell :** This picture was taken last year, when General Wavell was C.-in-C., India. Lieut.-General Quinan is under the command of General Auchinleck, who is now in control of the Eighth Army in Libya, the Ninth Army in Syria, and the Tenth Army in Iraq and Iran. General Quinan is fifty-seven years of age : he entered the Indian Army in 1905

The World of Books—By Vernon Fane

# PEACEFUL READING IN A TROUBLED WORLD

*The Old School Tie of Massachusetts—Portrait of an American Gentleman; An Elizabethan Slave; Ella Maillart's Seafaring; Mercury on Campden Hill*

IN the erroneous hope that it might afford them some protection in a possible libel action, some authors put a note at the beginning of a work of fiction to the effect that all the characters therein are imaginary, and have no connection with any living person. This amusing formula has also found its place among the titbits which precede most moving pictures nowadays, in which our old friends Messrs. Van-Nest-Polglase, Homer Kyyam, and the rest of them figure so delightfully.

Mr. John P. Marquand, the author of **H. M. PULHAM, ESQUIRE** (Robert Hale. 9s.), expands the familiar disclaimer into an interesting two-page note to the reader, in which he makes the case that his characters should "stand up by themselves in their inky world," and that, "no actual human being is convincing in this highly artificial environment. Living men and women are too limited, too far from being typical, too greatly lacking in any universal appeal, to serve in a properly planned piece of fiction." That is well said as far as it goes, and it goes as far as it should, in defining the novelist's undeniable right to draw upon his conglomerate experience. (But to where does this dictum lead us in consideration of that modern hybrid known as "fictionised biography"?)

Mr. Marquand is on the safest of safe ground, for his H. M. Pulham can have been drawn from nothing else but the very active well-springs of an accepted type. It is a tribute to the author that Mr. Pulham is also very much alive, recognisably human, and a man with whom, having read his story, we feel we are on easy terms.

Another thing about Mr. Pulham is that he leaves one with the impression that his creator set out to pillory him as a type. In a sense it is a tribute to Mr. Marquand that Pulham steps down from the pillory with a good deal of dignity, having excited in the onlookers a large measure of sympathy and understanding for himself. Mr. Marquand is not the first novelist who has "laid" for a character, only to find that the character has turned the tables on him in the long run.

H. M. Pulham is a man of fifty, a New England gentleman of the most correct antecedents, having been educated at the right schools and the right university. He represents in American life everything that in recent days in this country has been derided in terms of the "old school tie." The American male is in the habit of clinging tenaciously to the friendships and ebulliences of the days of his youth. Two or three of them gathered together, no matter how bald, pot-bellied, aged or middle-aged, will quite naturally be referred to as the "boys." So it was well within the pattern of their lives that Pulham's old Harvard classmate, Bo-jo Brown, should be roping him into the preparations for the celebration of the twenty-fifth anniversary of their class reunion.

The occasion gives Pulham the opportunity to meditate upon that quarter of a century. On his graduation, and in obedience to his father's wishes, he went into an old-fashioned stockbroking firm. True, he had his qualms, but he did what he was told. Then came the world war and its experiences, which jolted some of the niceties built up during his correct upbringing, and although he remained a sound Episcopalian and an equally sound Republican, some of the doubts had crept in, and he returned from the war more mentally disturbed than when he went into it. The restlessness which had taken hold of his generation led him to business activities foreign to his type, and in this rebellious period he met and fell in love with a girl who was equally outside his own orbit.

Then his father died, and Pulham had to go home and settle things up. The longer he stayed there, the more certain it became that that was where the path of his life was set. The brief period of rebellion was over: he married "suitably," had two children, and life pursued the even tenor of its Bostonian way.

In turn, the children grow up, and in them the problems of his own youth rise again. The passive resistance within himself is there, but the conflict is also present. His own abortive attempts at a breakaway; the bitter-sweet memory of forsworn happiness are present and inescapable.

No praise can be high enough for the technique with which Mr. Marquand uses dialogue, soliloquy, action, humour, background and a number of ancillary characters to achieve this Smug's progress. It is warm, human, satisfying and eminently readable.

**AN AMERICAN GIFT TO PROTECT AN HISTORIC LONDON EFFIGY:** A gift of money provided by Mr. Grover Higgins, a Cleveland lawyer who appreciates historic London, has been spent in providing a brick and iron shelter for the Stow effigy in the City church of St. Andrew Undershaft to protect it against bomb blast. John Stow was London's first topographer and the effigy shows him working at his desk with a quill pen. The latter is renewed annually by the Lord Mayor of London. In the above picture, Mr. H. E. Marr, the Verger, is exhibiting the iron door of the new brick "shelter"

No need for Mr. Jack Lindsay to announce that his characters bear no resemblance to any living person, for his new novel, **THE STORMY VIOLENCE** (Dakers. 8s. 6d.), is Elizabethan. It was tough in those days to be landless and without a master, and it was even tougher to be branded as a serf.

Dick Gibbes was even more unfortunate than those luckless, hunted slaves, for he was an educated man, and had fallen to this state partly through his father's misfortune, and partly through his own folly. If there is anybody who still believes in the "Merrie England" of Elizabeth's days, this fine historical novel ought to disillusion them.

Dick had a rough enough time on Mr. Cave's farm, but he had even a rougher one when he escaped and found himself having to thieve and cringe his way through the horrible stews of Elizabethan London. Only when he is press-ganged and forced to go to sea is he able to reassert his manhood. Although this book is brutal and horrifying in some of its aspects, the author succeeds in drawing through it some of the finer threads of human and spiritual experience.

Miss Ella Maillart, whose *Forbidden Journey* and *Turkestan Solo* won her fame, not only as a traveller but as a writer of travel books, has revealed a further and unexpected side of her personality in **GIPSY AFLOAT** (Heinemann. 12s. 6d.). The happenings in this book obviously pre-dated her more famous journeyings, but she presents the account of them with the same amount of ebullience and *joie de vivre*.

She begins these adventures as a deck-hand on a sailing-barge in the Channel. Then she takes a Mediterranean cruise in a yawl. Following that, she lops about the waterways of Holland, puts in some time in the turbulent Bay of Biscay, goes racing at Cowes and finally ends up in a quiet English backwater. For some of us it is full of the nostalgia of carefree days, when little boats were not being put to grim purposes, and through it all the author's lively personality translates scenes and characters in the manner which has delighted us in her previous books. Mlle. Maillart has apparently written this straight into English, and in consequence we get a more faithful look at her than we have ever had before.

Mr. Ashley Dukes, who is well known as the courageous and affable director of the Mercury Theatre, the author of *A Man with a Load of Mischief*, and the producer of *Murder in the Cathedral*, takes a look back at life as he has lived and endured it during the past thirty-five years. **THE SCENE IS CHANGED** (Macmillan. 12s. 6d.) is the reflections of a man of the theatre who, in the course of his lifetime, has enriched the English theatre by the courage of his experiments, and by a sensitive and generous personality. Although he ranges the world from California to Greece, and moves in retrospect from London to New York, from Paris to Berlin, from Vienna and Salzburg to Melbourne, from Munich to Sienna and from Hollywood to Florence, he never, in spirit, strays far from his beloved Campden Hill. That steadfast side of him is summed up in this: "Yes, Austria was the escapist country for many years between the wars, and Venice has always been the escapist city, and the Mediterranean the escapist sea. But I never liked any of them for that reason only, or mainly; and further and unexpected side of her personality in **GIPSY AFLOAT** (Heinemann. 12s. 6d.). The happenings in this book obviously pre-dated her more famous journeyings, but she presents the account of them with the same amount of ebullience and *joie de vivre*.

She begins these adventures as a deck-hand on a sailing-barge in the Channel. Then she takes a Mediterranean cruise in a yawl. Following that, she lops about the waterways of Holland, puts in some time in the turbulent Bay of Biscay, goes racing at Cowes and finally ends up in a quiet English backwater. For some of us it is full of the nostalgia of carefree days, when little boats were not being put to grim purposes, and through it all the author's lively personality translates scenes and characters in the manner which has delighted us in her previous books. Mlle. Maillart has apparently written this straight into English, and in consequence we get a more faithful look at her than we have ever had before.

Mr. Ashley Dukes, who is well known as the courageous and affable director of the Mercury Theatre, the author of *A Man with a Load of Mischief*, and the producer of *Murder in the Cathedral*, takes a look back at life as he has lived and endured it during the past thirty-five years. **THE SCENE IS CHANGED** (Macmillan. 12s. 6d.) is the reflections of a man of the theatre who, in the course of his lifetime, has enriched the English theatre by the courage of his experiments, and by a sensitive and generous personality. Although he ranges the world from California to Greece, and moves in retrospect from London to New York, from Paris to Berlin, from Vienna and Salzburg to Melbourne, from Munich to Sienna and from Hollywood to Florence, he never, in spirit, strays far from his beloved Campden Hill. That steadfast side of him is summed up in this: "Yes, Austria was the escapist country for many years between the wars, and Venice has always been the escapist city, and the Mediterranean the escapist sea. But I never liked any of them for that reason only, or mainly; and now that the mood is passed, and only the tale remains, let us grant that they have their own place in the theatrical picture of the time."

Everything in Mr. Ashley Dukes' life is related to that theatrical picture. The view may be limited and circumscribed, but there are many of the more versatile whose gifts have been less beneficently bestowed upon our generation.

## WASTE PAPER MUST STILL BE SALVAGED

**"POSTING" THEIR SALVAGED PAPER!** Coulsdon and Purley District now have four "pillar-boxes" in which they can "post" their waste paper to the Council. These boxes cannot be mistaken, for a poster on each bears the title "Surveyor's POSTscript"

**WHY NOT "POST" YOUR OWN PAPER SALVAGE?**

## THE SHAFTESBURY HOMES AND "ARETHUSA" TRAINING SHIP

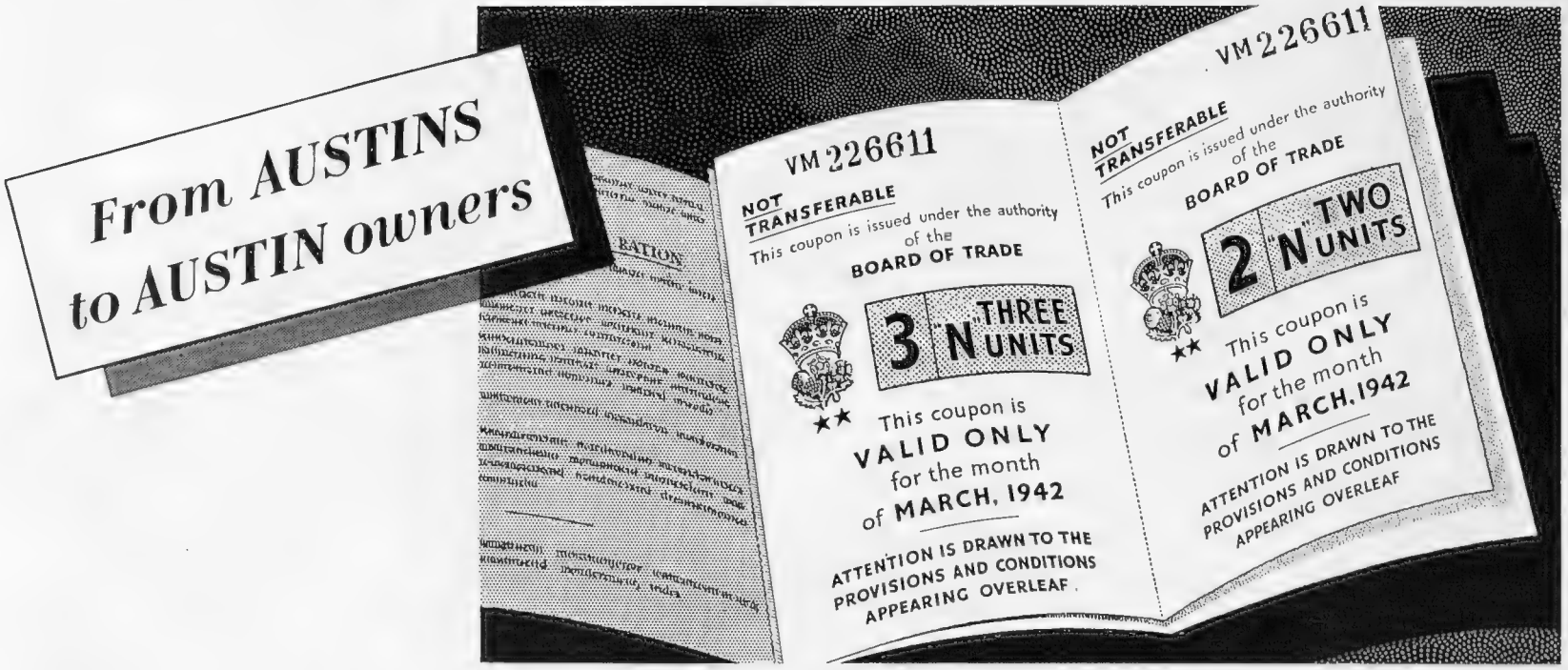
This Society has recently heard of another ex-*Arethusa* boy who has given his life in the Merchant Navy to save that of his bo'sun. It was a heroic deed, of which space will not permit the giving in full, but daily the Society is hearing of brave deeds done by those who had their chance in the Training Ship *Arethusa*. More boys are clamouring for the chance to be trained for a sea life. Will you send a gift to support such a work? Please address to Headquarters, 164, Shaftesbury Avenue, London, W.C.2.

*The fact that goods made of raw materials in short supply owing to war conditions are advertised in this publication should not be taken as an indication that they are necessarily available for export*

# Haig

*Obtainable also in small sizes*

*No finer Whisky goes into any bottle...*




## THE COUPON SITUATION . . .

Petrol coupons may get scarcer still, but no motorist is better off than the Austin owner. For Austin cars are proving specially economical even on the very average kind of petrol we get from the Pool. In days of peace some motorists were heard to say (even to boast) that their cars would only run well on fancy fuels loaded with high efficiency "dopes." But Austin cars run well on any petrol and better and farther than most on petrol of quite ordinary standards.

# Aren't you GLAD you invested in an AUSTIN

*Read the Austin Magazine—it contains useful tips—4d. monthly from your newsagent.*

B.G.147

T.G. 3b.

The symbol illustrated here is the Mark of "F.C.A.S.," which is equipped and staffed for the repair, servicing and maintenance of complete aircraft and engines, and the manufacture of component parts.

The subsidiary company, Field Aircraft Instruments and Equipment Ltd., undertakes the design and construction of aircraft instrument test equipment of the highest quality and specialises in the repair of all types of flight instruments and engine ancillary and ignition equipment.

# FIELD CONSOLIDATED AIRCRAFT SERVICES LTD.

All communications should be addressed to:
P.O. Box No. 5, Great Woodcote House, Purley

# The day will come . . .

The day will come when flags will be unfurled and waved by joyous hands . When black-out curtains will be torn down from the windows . . . When gas-masks will be packed away as treasured souvenirs of the war . . . When Tommy will be seen in civvies once again . . . When fighting between nations will have ceased. The time will come when gleaming new Standard models will be seen at the Motor Show and on the new roads of the ***new world . . .*** But before peace comes victory, and before victory, unceasing work and effort . . . The Standard Motor Company are looking forward to the days when *their* plans for the ***new world cars*** can be embarked upon . . . .

**The Standard Motor Company Ltd., Coventry**

# For Officers of H.M. Forces

*The articles advertised can only be supplied to Officers of H.M. Forces and Allied Forces (including Women's Services), and the Board of Trade Order requires a declaration sent with each order, stating the Rank and Unit of purchaser*

USEFUL Compact Case for carrying toilet articles etc., washable, with adjustable loops in the lid.

| Sizes | 9 ins. | 10 ins. |
|---|---|---|
| Pigskin | 45/- | 51/6 |
| Lizard Grain-calf | 41/6 | 46/6 |

FAWN Canvas Bag with zip fastener and leather binding. Extremely light in weight. Length 18 ins. **68/6**

BROWN Canvas Kit-bag, very capacious, with leather-covered frame and binding. Strong and practical with loops for padlock (not included).

Length 22 ins. **81/6** Length 24 ins. **86/6**

**Debenham & Freebody**

Langham 4444 WIGMORE STREET, LONDON, W.1 (Debenhams, Ltd.)

# Famous Spa Treatment
## Cleanses and Invigorates
## LIVER KIDNEYS & Blood-Stream

THE EVILS of congestion—headache, lassitude, depression, mental fatigue, and liverishness—are speedily banished by Kutnow's Powder. A spoonful of this fine saline-alkaline, dissolved in cold or warm water, reproduces the essential medicinal virtues of the famous Carlsbad mineral springs.

Taken regularly before breakfast, Kutnow's Powder cleanses and stimulates the liver and kidneys, and keeps you internally clean. Purifying the blood-stream, it eliminates excess bile and the pain-causing acids of rheumatism, lumbago, sciatica, neuritis, gout, &c.

For half-a-century Kutnow's Powder has had the special recommendation of the medical profession, for its constant efficacy in disorders of the alimentary system, and because it provides an agreeable and most satisfactory treatment for uric acid troubles.

Guaranteed free from sugar, Kutnow's Powder is perfectly safe and eminently suitable for the diabetic.

# KUTNOW'S POWDER

*Kutnow's effervescent Powder, originally produced at Carlsbad, is obtainable of all good-class chemists. Every bottle bears the "Deer Leap" registered trade-mark and facsimile signature S. Kutnow & Co., Ld.*

**APPROVED BY DOCTORS FOR FIFTY YEARS**



# "ANY QUESTIONS?"

*The first question comes from Mrs. Wilson, of Bolton. She asks: "Is there a shortage of Carr's Biscuits?"*

*The Manufacturer:* "Although a great many of their Staff are away helping the National war effort, Carr's are actually producing more biscuits than ever before, and sharing them between the Services and Shops. Their high quality has led to increased demand, so grocers are occasionally sold out, but fresh supplies are constantly arriving."

*The Philosopher:* "As Aristotle says, 'Be a little patient and your turn will come!'"

**DEFINITELY WORTH WAITING FOR**

# CARR'S BISCUITS

THE FIRST BISCUIT MACHINE 1831

*A Necessity and a Luxury*

*Carr's of Carlisle*

© C658



**Tri-ang TOYS** FOR GIRLS AND BOYS

**FROG** MODEL AEROPLANES

**Pedigree** PRAMS & FOLDERS

*All the best babies have them*

*Pedigree Pets* DOLLS AND SOFT TOYS

**LINES BROS LTD** LONDON



*Now made only in the popular*

**SLOTTED PATTERN**

3º each

5 for 1/3 *including Purchase Tax*

For clean, comfortable shaving the Eclipse Blade stands supreme and, when used in conjunction with the Eclipse Red Ring Razor, the perfect shaving combination is obtained.

**'Eclipse' Razors: 3/3 & 5/6** *including Purchase Tax*

JAMES NEILL & CO. (SHEFFIELD) LTD.

El82e



# IN QUEST OF GOOD HOTELS

ADVICE BY ASHLEY COURTENAY

*Letters, accompanied by a stamped, addressed envelope for reply, should be addressed to him c/o The Editor, THE SPHERE, Commonwealth House, 1, New Oxford Street, London, W.C.1.*

**BOURNE HALL HOTEL, BOURNEMOUTH**

Offers shops, scenery and plenty of winter sunshine. Provides admirable winter quarters in a central position. Bridge, Billiards, Warmth and plenty of breathing space. Resident Directors: Mr. and Mrs. R. J. Bray. From 5 gns.

**THE NORFOLK HOTEL**

**BOURNEMOUTH**

Traditional superiority. Combines all the factors that one expects to find in a first-class hotel, Restaurant, grill room, men's bar, Richmonde Lounge—the social rendezvous of Bournemouth—with Marcel Torrent and his orchestra. Apartments each with P.O. telephone and most with private bathroom. Tel. 7272 every room. *Resident Directors:* Mr. and Mrs. F. J. McInnes.

**CASTLE HOTEL, DEGANWY, North Wales**

An excellent hotel for a wartime break. With its fifty comfortable bedrooms, this pleasantly situated hotel on the Conway Estuary offers peacefulness and plenty in the shape of golf, fishing, boating, with bowls and riding near by. Tel.: Deganwy 83358.

**COOMBE HOUSE HOTEL**

**DORSET, Nr. Shaftesbury**

Away from the atmosphere of war. Situation healthy and beautiful. Every comfort. Trains met Semley by appointment. Tel.: Shaftesbury 130.

**WOODCOTE HOTEL, DULVERTON, Somerset**

On edge of Exmoor and the border of Devon. As perfect a spot as you could hope to find for peaceful leave quarters. Central heating, log fires. Hacking, hunting, walking midst delectable scenery. Two doubles available from 4½ gns. per person. Tel.: Dulverton 129.

**WEST LODGE PARK HOTEL** HADLEY WOOD, Near Barnet, Herts.

In the heart of the country, yet but half an hour from Piccadilly Circus to Cockfosters. A country house of character and charm. Sixty acres of ground and not a roof in sight. Golf course at the drive gates. Proprietor: B. Victor.

**THE RED HOUSE**

**LEATHERHEAD**

Always very popular amongst Business and Retired people because of its accessibility to Town and its comfort. Vacant rooms are few and far between, but they are worth waiting for. Tel.: 2271.

**THE COMPLEAT ANGLER** A RIVERSIDE RETREAT FOR THE BUSINESS MAN

Under the supervision of Mr. BALLY, late of Boulestin, this hotel combines comfort and convenience with food that only an expert can produce.

Within easy reach of London, yet deep in the country

**MARLOW-ON-THAMES**

**SPREAD EAGLE HOTEL**

**MIDHURST, Sussex**

Tel.: Reception—Midhurst 10; Visitors—Midhurst 343

**Terms from 6 gns.**

A.D. 1430. Not a prohibited area. For leave or a restful holiday come to this historic house; excellent food from our own farms, modern comforts, good fellowship in atmosphere of the good old times.

**MOOR HALL HOTEL, NINFIELD, Sussex**

Here, 250 ft. up, facing due south and *not* in a defence area, you can get a break from war routine. Fresh produce from our own farm and gardens. Fishing and rough shooting. Club licence. Trains met Crowhurst or Bexhill. From 4 gns. Tel.: Ninfield 330.

**FUIDGE MANOR, SPREYTON, Mid-Devon**

Perfect peace, perfect comfort and perfect relaxation in the very heart of the country. Hard court, squash court and cheery licensed club room. Inclusive terms from 5½ gns. A few rooms now unexpectedly available for the winter months. Tel.: Whiddon Down 205.

**WILLIAM AND MARY HOTEL** With its 16 bedrooms

(and Guest House 18 bedrooms) remains open to cater for the Services, War Workers and all passing through on business bent. Restaurant open for Non-Residents, Club Cocktail Bar.

Tel.: 2575 and 203911 **STRATFORD-ON-AVON**

**HEADLAND HOTEL**

**TORQUAY**

Though full at the moment, it is an hotel to make a note of should you wish to enjoy quiet luxury midst peaceful surrounds. The Management will welcome your enquiries.

**THE DRAGON HOUSE**

**WASHFORD, Somerset**

Strategically placed for Minehead, the Quantocks and the sea at Blue Anchor. A homely hotel for war-time residence. Country fare and country contentment. Tel.: Washford 215.

**THE OLD HOUSE HOTEL**

**WINDSOR**

There are occasional bedroom vacancies and always a chance of good food and good wine if you will but 'phone beforehand Windsor 1354. Luncheons 4s. 6d. to 6s. Dinners 6s. to 7s. 6d.



## The WAR and HOMELESS CHILDREN

4 CHILDREN RECEIVED EVERY DAY

1,967 TAKEN FROM DANGER AREAS INTO 90 SPECIAL WAR NURSERIES

5,081 CHILDREN RECEIVED SINCE WAR BEGAN

6,226 CHILDREN NOW IN OUR CARE

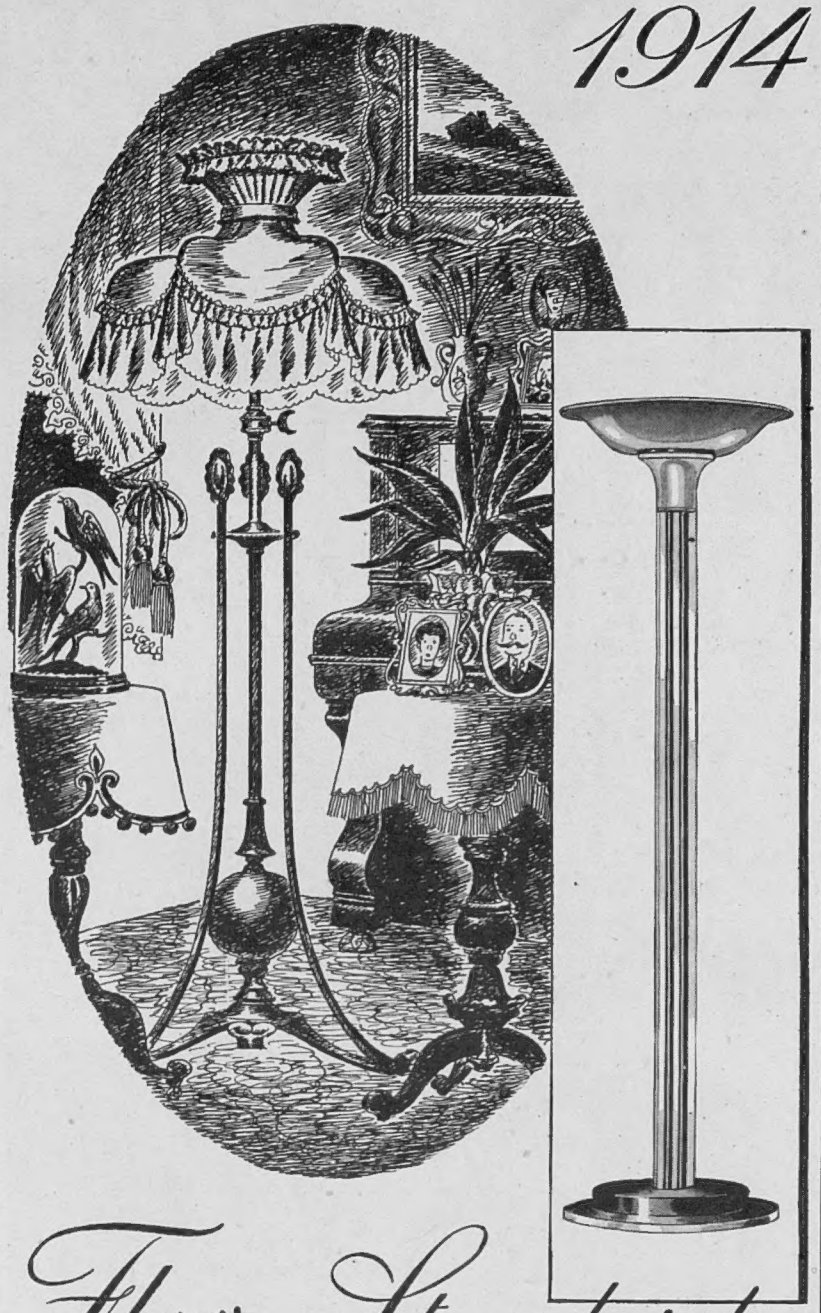
*Where do we go now?*

# WAIFS & STRAYS SOCIETY

JOEL STREET, PINNER, MIDDLESEX


PRINTED IN ENGLAND by THE ILLUSTRATED LONDON NEWS AND SKETCH, LTD., Milford Lane, London, W.C.2, and Published Weekly by ILLUSTRATED NEWSPAPERS, LTD., Commonwealth House, 1, New Oxford Street, London, W.C.1. SATURDAY, MARCH 7, 1942. Entered as Second-Class Matter at the New York (N.Y.) Post Office, 1903.

# *Standard Lamp... 1914*



# *Floor Standard... ...today*

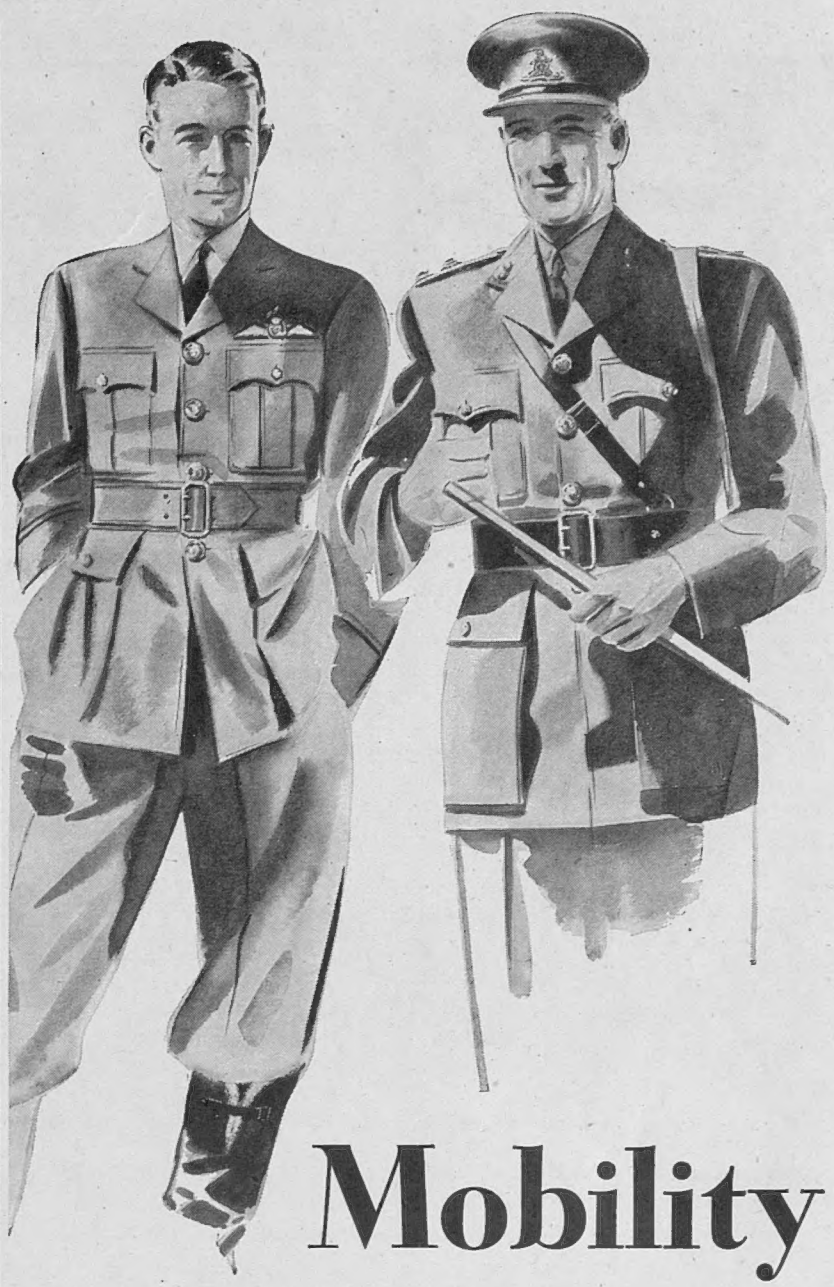
THE contrast between the elaborate silk covered lamp standard of 1914, and its modern elegant counterpart symbolises the rapid and continuous progress always being made in the electrical industry. Science did not stand still in 1914 and to-day the G.E.C. is keeping abreast of developments and improvements that will result in better electrical equipment for the home when this war is over.

**Remember**

# G.E.C.

**FOR EVERYTHING ELECTRICAL**

*Advt. of The General Electric Co. Ltd., Magnet House, Kingsway, London, W.C.2*



# Mobility

Our widely distributed shops and Service depots, and the close liaison we maintain between them, enables our Uniform Service to operate with equal speed and efficiency almost anywhere. At our branches we stock perfectly tailored uniforms for the Services ready to wear in a wide range of sizes. This alone has prevented many a flat spin. More important, however, is the fact that we can keep pace with the man who is on the move. Measurements taken, for instance, at Plymouth may materialise as a uniform to be fitted in Birmingham and finally delivered in Edinburgh.

**JUST A PART OF THE**

# AUSTIN REED

**SERVICE**

**103-113 REGENT STREET, W.1 • 77 CHEAPSIDE, E.C.2.** Aldershot, Amesbury, Barmouth, Bath, Belfast, Birmingham, Bothwell, Bournemouth, Bristol, Coventry, Dunbar, Edinburgh, Glasgow, Grantham, Harrogate, Hove, Hull, Leeds, Liverpool, Llandrindod Wells, Llandudno, Manchester, Norwich, Nottingham, Oxford, Plymouth, Richmond (Yorks), Sheffield, Shrivenham, Southampton.

**OLD BOOKS HELP TO MAKE BULLETS AND MINES—BEAVERBROOK WANTS THEM TURNED OUT NOW—PLEASE!**

# Famous QUEENS

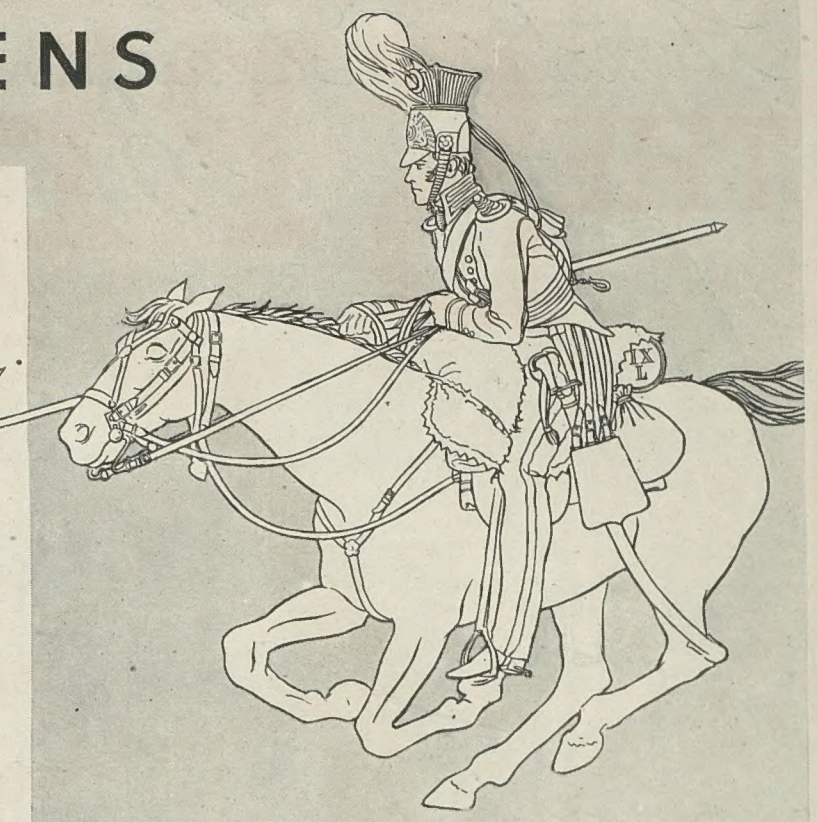
## 9th Queen's Royal Lancers

This famous Regiment dates from Queen Anne. Disbanded at the Peace of Utrecht. Restored in 1715 as Wynne's Dragoons. Converted into Light Dragoons in 1783. Equipped as Lancers 1816. The regiment attracted the notice of William IV and Queen Adelaide in 1830 who ordered it to be called the 9th or Queen's Lancers and later the 9th or Queen's Royal Lancers.

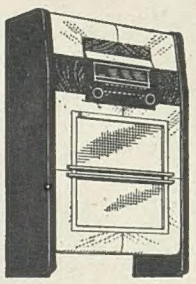
# HIGHLAND QUEEN

**GRAND LIQUEUR SCOTCH WHISKY**

also attracts particular notice — because of its outstanding quality mellowed by age, and its distinction among well-known whiskies.



**MACDONALD & MUIR LTD., LEITH, EDINBURGH**
*Distilleries :* GLEN MORAY — GLENLIVET, MORAYSHIRE AND GLENMORANGIE, ROSS-SHIRE.



*The age of discretion . . .*

The blaring horn of the early phonograph was typical of a more flamboyant era . . . a period of clashing colours, fantastic designs and superfluous ornament. To what degree has the development of electricity changed our tastes? Now we are in an age of discretion . . . the concealed loud-speaker and the simple design of the modern radio . . . the smooth flowing lines of electrically welded metal . . . the soft, even flood of modern lighting in home and factory. All these things have come from electrical development; from unceasing research and great achievement, in which the House of PHILIPS holds a proud record.

# PHILIPS

RADIO · LAMPS · X-RAY & ELECTRO-MEDICAL EQUIPMENT · DISCHARGE LIGHTING · SOUND AMPLIFYING INSTALLATIONS · ARC WELDING EQUIPMENT & ELECTRODES

PHILIPS LAMPS LTD., CENTURY HOUSE, SHAFTESBURY AVENUE, W.C.2


PRINTED IN ENGLAND by THE ILLUSTRATED LONDON NEWS AND SKETCH, LTD., Milford Lane, London, W.C.2, and Published Weekly by ILLUSTRATED NEWSPAPERS, LTD., Commonwealth House, 1, New Oxford Street, London, W.C.1. SATURDAY, MARCH 7, 1942. Entered as Second-Class Matter at the New York (N.Y.) Post Office, 1903.